



# BIOTROHN® LIST OF SOFTWARE

USE OF THE PROGRAMS

# **DISEASES GENERAL**

**1-27**

The disease is considered as the state where there is a deterioration of the health of the organism. All diseases involve a weakening of the body's natural defense system or those that regulate the internal environment. Even when the cause is unknown, they can almost always be explained in terms of physiological or mental processes being disturbed.

It can be considered from two conceptions: a subjective one, which is discomfort (feeling bad with different intensity), and an objective one, which is what affects the ability to function (limitation of bodily functioning to different degrees, can even reach be disabled).

We consider that all disease is lack of energy. To avoid this weakening, it is necessary to keep defenses high through healthy habits such as a balanced diet, avoiding alcohol and tobacco, physical exercise and a balanced emotional state (both in our personal lives and in our way of relating).

The fundamental premise is based on the fact that the organism is capable of eradicating diseases by itself, as long as it manages to obtain the necessary energy, frequency and communication. Said communication is mediated by the resonance effect, that is, the information is sent both by biochemical signals (particles) and by energy transmission (waves).

**Human beings have the wonderful ability to heal themselves, however, in order for the power that comes from within us to develop, sometimes it is necessary to awaken it.**

**Below we briefly explain the 135 programs that we use through the Biotrohn, with which you can experiment. Remember! first: each user is different and second: similar symptoms can be approached from different perspectives.**

## **1. UNIVERSAL FREQUENCY\_ 1:01:4**

## **2. GENERIC SEARCH\_ 1:05:59**

**Both Universal Frequency and Aluka Generic are different generic programs that we recommend starting with in case of an ailment without a clear specification or an illness that is not listed.**

**They also serve to combine or alternate with other specific programs: they are designed to activate the immune system.**

**When the frequency is correct, as a general rule, you feel more intensity or tickling with ups and downs.**

**The Biotrohn works similar to an FM radio station, if you guess the frequency the radio tunes in and the station is heard. The same happens in the body.**

**Only if the frequency is correct, the pathogen in question will be overexcited and perish, due to this circumstance, freeing the body from the pathogen, health is restored.**

**On the other hand, it can emit softer frequencies that serve to stimulate the body's own immune system.**

**What makes it unique compared to other frequency generators is its wide range, precision up to 1/1000 Hz and its variable frequency, which other cheaper devices do not have. This makes it a perfect and very useful tool for professional therapists, especially in therapies combined with other products.**

**The difference between the two is that Generic Aluka does a superficial reset through systems, tissues and organs, and Universal Frequency is more focused on the cellular vibratory level.**

### 3. GENERAL INFECTION\_

1:02:48

General infection is usually caused by microorganisms that invade the body and multiply in it. There are many types of infectious microorganisms.

After invading the subject's body, the microorganisms must multiply to produce the infection. After multiplying, three things can happen:

Germ continue to multiply and overwhelm the body's defenses. 1.

A steady state is reached, which causes a chronic infection. 2.

The organism, with or without medical treatment, destroys and eliminates the invading invasion by most microorganisms is initiated by their adhesion to the cells of the subject. This implies a connection between the microorganism and the cells of the organism similar to that of a key with its lock. Being able to adhere to the surface of a cell allows microorganisms to establish a base from which to invade tissues.

### 4. DETOXIFICATION\_

1:22:55

Detoxification is the process by which the human body is able to eliminate those substances that are toxic and harmful to the body.

The majority of exogenous toxins appear as a consequence of a poor diet or other substances harmful to the body and end up in the liver, as the organ in charge of detoxifying them. We are talking about products such as medicines, alcohol, industrial and refined products, and drugs, but also about other substances that can accidentally reach our interior, such as herbicides, pesticides, insecticides, or pollutants in

general.

Other organs that can be affected by the detoxification processes of these substances are the lungs, the intestine, the kidneys or even the skin itself.

The detoxification program seeks to stimulate these processes to reduce fluid retention and help eliminate toxins that accumulate in the body.

## **5. COMMON COLD\_**

**0:56:01**

The common cold, also known as a catarrh or constipation, is a common viral infectious disease of the upper respiratory tract that affects the nose, sinuses, pharynx, and larynx. It is mainly caused by rhinoviruses and can affect people of all ages.

Symptoms appear one to two days after contact, generally include runny nose, runny nose, nasal obstruction, sore throat, sneezing, malaise, low fever, and cough; they reach their greatest intensity between the first and third day of evolution and last from seven to ten days, although occasionally they can persist for up to three weeks. Fever occurs more often in children. As one advances in age, the incidence of the common cold is lower.

A cold virus spreads through tiny airborne droplets released when a sick person sneezes, coughs, or blows their nose.

You can catch a cold if:

- A person with a cold sneezes, coughs, or blows their nose near you.
- You touch your nose, eyes, or mouth after touching something contaminated with the virus, such as a toy or doorknob.

People are most contagious during the first 2 to 3 days of a cold. A cold in most cases is not contagious after the first week.

## **6.VIRAL FLU\_**

**1:17:18**

The flu is caused by an intense viral infection that affects the respiratory system since it is transmitted through the air, by breathing next to someone previously affected who is sneezing, for example.

One of its characteristics is that it starts abruptly and unequivocally, leading to high fever, up to 40 degrees or more, and difficulty swallowing or breathing. The pharynx is the first organ affected, followed by the nostrils. The headache is very strong and recurrent.

Headache and fever, muscle and bone pain, chills even when covered by several blankets, total lack of appetite and absolute tiredness -what is known as a "stuck"- concur at the beginning of a flu process, in addition to eye tearing and feeling of being really bad.

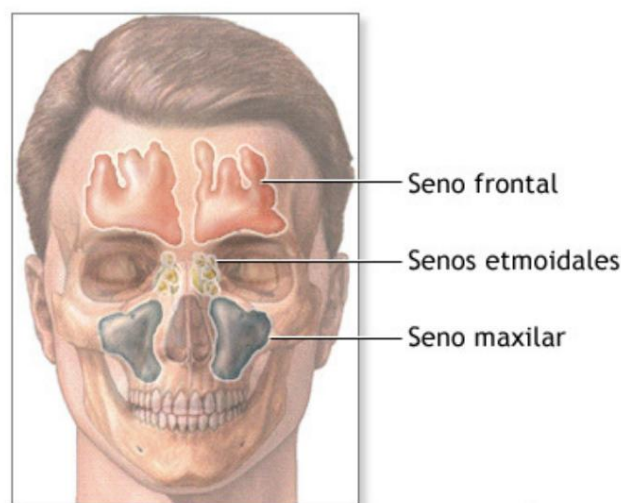
These symptoms, which do not occur in colds, last about six days, 15 in severe cases, during which no treatment other than that aimed at reducing headache or fever is effective. There is no effective therapy against influenza viruses. The most reiterated advice by doctors is to stay in bed while there is fever and general prostration. After the first phase, the flu gives way to a remarkable weakness, which gradually disappears as hunger recovers.

It is very convenient to frequently drink warm liquids that soften the throat. Or make vapors with eucalyptus to unclog the nostrils. The flu is not a reason for a medical visit except when the respiratory difficulties, and the mucus that they give way to, become a bronchial or pulmonary infection. In these cases there is a risk of pneumonia and antibiotics are indicated.

## 7. SINUSITIS\_ 0:30:00

It is present when the tissue that lines the sinuses becomes swollen or inflamed. It occurs as a result of infection by viruses, fungi or bacteria.

The sinuses are air-filled spaces in the skull. They are located behind the forehead, the bones of the nose, the cheeks, and the eyes. Healthy sinuses do not contain bacteria or other microorganisms. Usually, the mucus can come out and the air can circulate through them.



When the paranasal openings become blocked or too much mucus accumulates, bacteria and other microorganisms can grow more easily.

Sinusitis can be presented by one of the following situations: -The small hairs (cilia) of the paranasal sinuses fail to remove the mucus properly. This may be due to some conditions.

-Colds and allergies can cause too much mucus to be produced or block the opening of the sinuses.

-A deviated nasal septum, nasal bone spur, or nasal polyps can block the opening of the sinuses.

There are two types of

sinusitis: -Acute sinusitis is when symptoms are present for four weeks or less.

Caused by bacteria that proliferate in the paranasal sinuses.

-Chronic sinusitis is when the swelling of the paranasal sinuses is present for more than 3 months. It can be caused by bacteria or a fungus.

Symptoms:

They occur after a cold that does not improve or worsens after 5 to 7 days.

Symptoms include: Bad breath or loss of sense of smell, cough that is usually worse at night, fatigue and general ill feeling, fever, headache, pressure-like pain, pain behind the eyes, toothache or facial tenderness, stuffy and runny nose, sore throat, and postnasal drip.

## 8. PHARYNGITIS\_ 0:56.58

Pharyngitis is discomfort, pain, or scratchiness in the throat that often causes pain when swallowing. Other symptoms may include fever, cough, congestion, body aches, and swollen lymph nodes in the neck.

Pharyngitis is caused by swelling in the back of the throat (pharynx), between the tonsils and the larynx.

Most sore throats are caused by colds, the flu, coxsackie virus, or mononucleosis.

Most cases of pharyngitis occur during the colder months.

The disease often spreads among family members and contacts close.



**The terms sore throat, pharyngitis, and tonsillitis are often used interchangeably, but they are not the same thing:**

**Tonsillitis refers to tonsils that are inflamed.**

**Pharyngitis is an infection caused by a specific type of bacteria (strep).**

**Sore throat caused by a virus, and these can only cause inflammation of the throat around the tonsils but not the tonsils themselves.**

## **9. IRRITATING COUGH\_ 1:25:21**

**Irritative cough (dry cough) is called a strong and dry cough, without expectoration, that is, without segregation of phlegm (unproductive cough). Irritative cough usually sounds harsh and bark-like; in many cases genuine coughing fits occur.**

**Dry cough occurs mainly when the respiratory tract is irritated. It appears, for example, in early colds and many lung diseases, but also as a side effect of some medications.**

**The penetration of foreign bodies, different inflammations such as laryngitis, or inflammation of the bronchial mucosa (bronchitis) can irritate the respiratory tract and produce a dry cough.**

**Depending on the cause, other discomforts may occur, such as sore throat, sneezing, hoarseness or dyspnea.**

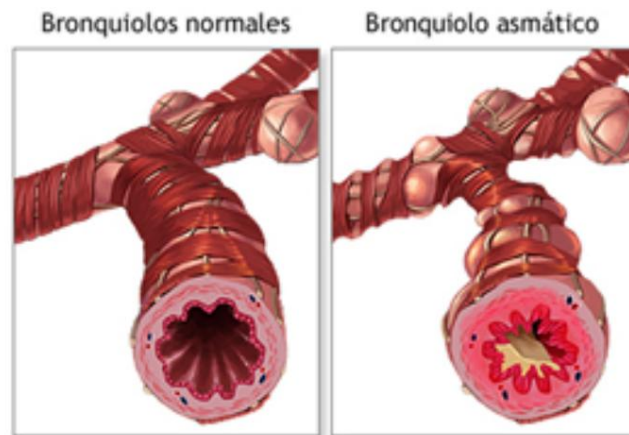
**Usually coughing is a protective reaction of the body. The cough reflex triggers it to clear the airways of foreign bodies that have penetrated, pathogenic germs and phlegm.**

**Various inflammations or allergic reactions may also be responsible for the irritative cough.**



## 10. PULMONARY ASTHMA\_ 1:03:35

Asthma is a chronic lung disease that inflames and narrows the airways. Asthma causes repeated periods of wheezing (wheezing), chest tightness, shortness of breath, and coughing.



Asthma is caused by inflammation (swelling) of the airways.

When an asthma attack occurs, the muscles around the airways become tight and the lining of the airways becomes inflamed. This reduces the amount of air that can pass through them.

In people with sensitive airways, asthma symptoms can be triggered by breathing in substances called allergens or triggers.

Common asthma triggers include:

Animals (pet dander or fur), dust mites, certain medications (acetylsalicylic acid or aspirin and other NSAIDs), changes in weather (most often cold weather), chemicals in the air or in food, exercise, mold, pollen, respiratory infections such as the common cold, strong emotions (stress), tobacco smoke.

Many people with asthma have a personal or family history of allergies, such as hay fever (allergic rhinitis) or eczema.

## 11.BRONCHITIS\_ 0:53:20

**Bronchitis is an inflammation of the lining of the bronchi, which connect the trachea to the lungs.**

**When the bronchi are inflamed or infected, less air goes into the lungs and less air goes out. As a consequence of this, you cough a lot, expelling sputum or phlegm. Bronchitis is said to be chronic when this type of cough is persistent and when there is no other underlying disease that can explain its origin.**

**Chronic bronchitis does not appear suddenly. The first symptom may be a persistent cough with phlegm after a poorly cured cold. If this is not monitored, over time colds cause more and more damage and the subsequent cough lasts longer and even becomes commonplace.**

**It manifests itself more frequently during winter. It can be caused by viruses, bacteria, and especially bacteria-like germs such as *Mycoplasma pneumoniae* and *Chlamydia*.**

## 12. PULMONARY TRACT\_ 0:53:20

**A generic program for lung conditions in the airways.**

Add a little bit of body text

## 13. NEUMONÍA

0:30.00

**Inflammation of the lungs, caused by infection with a virus or bacteria, fungi, or parasites, characterized by high fever, chills, severe pain on the affected side of the chest, cough, and expectoration.**

**People with chronic diseases, both immunosuppressed and transplant recipients, those receiving chemotherapy and HIV patients are more prone to this infection.**

## **14. GENERAL ALLERGY\_**

**0:59:20**

**Allergy is a defense reaction of the organism against external substances that penetrate the body. Those who have allergies are often sensitive to more than one**  
**What.**

**These substances can penetrate**  
**through: - the digestive system (food, medicines) -**  
**the respiratory system (inhalants) -**  
**absorbed through the skin (contactants)**  
**- crossing the skin (injections, bites).**

**The substances that usually cause reactions are: pollen, dust mites, mold spores, animal dander, food, insect bites, medicines...**

**The body's immune system recognizes these substances as foreign and tries to neutralize them. However, in most allergic reactions it responds to a false alarm. Genes and the environment probably play a role in allergies. People without allergies also recognize them as foreign, but their body neutralizes them without harming itself, through mechanisms called tolerance. People with allergies try to neutralize them by mechanisms that become harmful against the body itself, and cause allergy symptoms.**

**Allergies can cause a number of symptoms such as runny nose, sneezing, itching, rashes, edema (swelling) or asthma. Allergies range from mild to severe. A severe reaction called anaphylaxis can be fatal.**

## **15. COLON IRRITABLE\_**

**1:00:00**

**Irritable bowel syndrome (IBS) is a disorder that leads to pain in the abdomen and changes in the intestine.**

**The reasons why the SII is presented are not clear. It can occur after a bacterial or parasitic intestinal infection (yardiasis). This is called post-infectious IBS.**

**Likewise, there can be other triggers, including stress. The gut is connected to the brain using hormonal and nerve signals that go back and forth between the gut and the brain. These affect bowel function and symptoms. Nerves can become more active during times of stress, which can cause the intestines to be more sensitive and become more compressed or contracted.**

## **16.NEPHRITIS\_**

### **0:33:20**

**It is a kidney disorder in which the spaces between the kidney tubules become swollen (inflamed). This can cause problems with the way the kidneys work.**

**Interstitial nephritis can be temporary (acute) or it can be long-term (chronic) and get worse over time.**

**The acute form of interstitial nephritis is most often caused by side effects of certain drugs.**

**The following factors can cause interstitial nephritis:**

**-Allergic reaction to a drug (allergic, interstitial and acute nephritis).**

**-Autoimmune disorders such as antitubular basal membrane disease, Kawasaki disease, Sjögren's syndrome, systemic lupus erythematosus or Wegener's granulomatosis.**

**-Infections**

**-Prolonged use of medications such as paracetamol (Tylenol), acetil salicylic acid (aspirin) and non-steroid anti-inflammatory drugs (NSAIDs).  
This is called analgesic nephropathy.**

**-Side effects of certain antibiotics (including penicillin, ampicillin, methicillin, sulfonamides and others).**

**-Side effects of other medicines such as furosemide, thiazide diuretics, omeprazole, triamterene or allopurinol.**

**-Very little potassium in the blood.**

**-Too much calcium or uric acid in the blood.**

**Symptoms of this condition include: blood in the urine, fever, increased or decreased urine output, mental status changes (drowsiness, confusion, coma), nausea, rash, swelling of the body in any area, weight gain (due to fluid retention), vomit, cough.**

## **17.ANXIETY\_**

**0:30:00**

**Anxiety is a natural adaptive mechanism that allows us to alert ourselves to compromising events**

**In fact, a certain degree of anxiety provides an adequate component of caution in especially dangerous situations.**

**Moderate anxiety can help us stay focused and face the challenges ahead.**

**Sometimes, however, the anxiety response system is overwhelmed and malfunctions. More specifically, the anxiety is out of proportion to the situation and sometimes even occurs in the absence of any ostensible danger. The subject feels paralyzed with a feeling of helplessness and, in general, there is a deterioration in psychosocial and physiological functioning.**

**It is said that when anxiety occurs at inappropriate times or is so intense and long lasting that it interferes with the person's normal activities, then it is considered a disorder.**

**Types of disorders:**

- After panic winch**
- Obsessive-compulsive disorder**
- Post Traumatic Stress Disorder**
- Phobias**
- Generalized anxiety disorder**

**To prevent anxiety, it is important to adopt a healthy lifestyle and avoid the use of drugs and substances that cause it (caffeine, theine and drugs such as ecstasy, amphetamines or LSD).**

**Practicing physical exercise on a regular basis, especially outdoors, also helps to clear the mind and avoid anxious feelings**

**In the same way, relaxation techniques help combat the appearance of crises. They can be learned from professionals or self-taught, through self-help books and audiovisual material.**

## **18.GENERAL FATIGUE\_**

**0:57:30**

**It is a feeling of lack of energy, exhaustion or tiredness.**

**Fatigue is different from drowsiness. Drowsiness is feeling the need to sleep. Fatigue is a lack of energy and motivation. Sleepiness and apathy (a feeling of not caring what happens) can be symptoms that accompany fatigue.**

**Fatigue can be a normal and important response to physical exertion, emotional stress, boredom or lack of sleep. Fatigue is a common symptom and is usually not due to a serious illness, but it may be a sign of a more serious physical or mental disorder. When it is not relieved by sleeping well, eating well, or having a low-stress environment, it should be evaluated by a doctor.**

**There are many possible causes, for example: anemia (including iron deficiency anemia), depression or grief, iron deficiency (without anemia), medicines such as sedatives or antidepressants, persistent pain, sleep disturbances ( insomnia, obstructive sleep apnea or narcolepsy), underactive or overactive thyroid gland, use of alcohol or drugs such as cocaine or narcotics, especially if used frequently.**

**Fatigue can also occur with the following illnesses: Addison's disease, anorexia, and other eating disorders, arthritis**

**including juvenile rheumatoid arthritis, autoimmune diseases such as systemic lupus erythematosus, cancer, congestive heart failure, diabetes, fibromyalgia, infection, especially one that takes a long time to recover from or treat, such as endocarditis (infection of the heart muscle or heart valves), parasitic infections, hepatitis, human immunodeficiency virus (HIV), AIDS, tuberculosis and mononuclei, kidney disease, liver disease, malnutrition.**

**Certain medicines can also cause drowsiness or fatigue, for example, antihistamines for allergies, blood pressure medicines, sleeping pills, steroids, and diuretics**

**Chronic fatigue syndrome (CFS) is a condition in which the symptoms of fatigue persist for at least six months and do not resolve with rest.**

## **19. LACK OF APPETITE\_**

**0:49:17**

**It is a situation that occurs when the desire to eat is reduced.**

**Main causes :**

**In addition to depression or other mood swings, stress and boredom can also make your appetite disappear, so they should be controlled**

**The causes of lack of appetite can be many, there are people who overnight get bored or lazy with food and mealtimes become a real problem, because they don't feel like anything .**

**You must pay close attention to be able to identify the causes for which you have lost your appetite and that way you can consult with the specialist so that together they find the solution to your problem.**

**For some diseases and infections:**

**Bacterial or viral infection can be one of the causes of loss of appetite, usually when a person has the flu, due to coughing, physical exhaustion, joint pain or even fever, you experience loss of appetite, but since this condition usually improves in a short time, it will immediately return to normal and therefore the desire to eat will return.**

**For psychological reasons:**

**One of the reasons that can cause loss of appetite is mood, some older people begin to have loss of appetite gradually, it is almost imperceptible and when the people who are around you realize the problem is already very advanced.**

**This problem also appears in people who have had an important loss, of a loved one who died or those who are facing a separation from their partner.**

**Within the psychological causes there are also those caused by eating disorders such as anorexia, this occurs when a person on their own decides to stop eating to lose weight, and due to the lack of nutrients, the body weakens and the total loss of appetite appears.**



### **Due to physical causes:**

There are some diseases that attack our body that can trigger loss of appetite, such as kidney failure, heart failure, hepatitis, HIV, hypothyroidism and dementia; In many cases of people who suffer from colon cancer, stomach cancer, as well as ovarian or pancreatic cancer, loss of appetite may appear, although not all people with these conditions they have experienced it.

Some women when they are in their first trimester of pregnancy have also experienced a greater or lesser degree of loss of appetite.

### **Due to external causes:**

Among the external causes that most cause loss of appetite is the consumption of hallucinogens, such as cocaine, heroin and amphetamines. This also includes medically prescribed medications such as antibiotics and those used in chemotherapies.

## **20. MENTAL CLARITY\_** **1:00:50**

The excess of alternatives leads to doubt, confusion, paralysis and dispersion.

This is key to take into account, because we live in a world where there is an excess of everything: excess information, excess data, excess alternatives, excess variety of products from the same range. . . social media excess

This excess of everything leads to a certain chaos —the opposite of clarity— which makes things much more difficult for us. Everything is less linear, more complex. Today everything invites confusion. There is a lot of noise around.

What is the conclusion? The ability not to let oneself be dragged by the environment, to have one's own thinking and to look from above —which has always been important — is even more so today

Mental clarity is detaching yourself from emotions caused by insignificant issues in your life. And when you have that much clarity, and you're focused, you immediately have a direct line to this deeper mind.

How do I maintain clarity of mind and emotional strength? And I answer: with discipline!

My mind is not clear because I have meditated for a week. You will have it for that week, or in the hours immediately following the meditation, but it is not a state that will remain because there are still wrong thoughts that will distract me. Or maybe I have the strength to keep a focused thought but suddenly an unforeseen event occurs that emotionally collapses me.

**Therefore, the only secret to staying clear is to take care of the mind and emotions as we take care of the body: daily, with discipline.**

**How many times do you take a bath a week? Spend the same time meditating.**

**What attention do you pay to the place where you eat and what you eat? Pay the same attention to the thoughts you accept for yourself, to what you hear from others, to what you receive from the media, to the music you listen to...**

**How much time do you take for your body to rest? Your emotions need it too, so don't go to bed loaded down with anger, frustrations, and the anger of the day.**

**One of the most important things to be successful is to have mental clarity, because mental clarity leads you to direct all your energies towards what is important without misleading or distracting you.**

**Simplicity, simplifying things, brings a lot—a lot—mental clarity, and mental clarity makes it easier for you to make decisions, be decisive or have focus, among other things Mental clarity is strength for the brain .**

## **21. INTERNAL HARMONY**

### **0.30.00**

**Inner harmony is a state of mind that allows us to live calmly and act with serenity, even in the midst of difficult situations. Inner harmony is not the absence of complicated problems or the negative emotions associated with them; nor is it the continuous demonstration of enthusiasm or good humor.**

**Inner harmony is neither permanent smiles nor constant expressions of self-confidence or optimism. This quality manifests itself as an equanimity and balance that, when setbacks appear, allow us to deploy our abilities towards appropriate corrective actions, if any, or calmly submit to the acceptance of reality, when the problems have no solution.**

**Inner harmony is a positive state - the ideal state, by the way - in which we would like to live. When a person is enjoying inner harmony, he is living well. What better reward for any experience? Despite its appeal, inner harmony is paradoxical: there is no path with unmistakable signs or a detailed sequence of steps that allow us to reach such a desirable condition with certainty.**

The experience of inner harmony is more the spontaneous result of a way of living than a planned or programmable goal. People almost always look for goals like money, friends, prestige or academic degrees; These purposes, although they can lead to success, do not necessarily lead to inner harmony. While inner harmony is very different from success, the two qualities are not mutually exclusive.

Those who enjoy inner harmony may well gain wealth, friendships, fame, or titles, but such things come naturally to them, and there is no frustration if these effects do not materialize. In the eyes of others such individuals are successful people; for themselves they are at peace with everything that happens in their lives. Inner harmony, which is personal and intimate, cannot come from outside; that would make it outer harmony.

## 22. INSOMNIA\_

0:58:30

Insomnia can be defined as the difficulty or inability to sleep or total lack of sleep. In clinical terms, it constitutes a subjective perception of dissatisfaction with the quantity and/or quality of sleep. It translates into unrefreshing sleep, which can lead to daytime sleepiness, lack of concentration, tiredness, poor memory, irritability, disorientation, traffic and work accidents, dark circles under the eyes, decreased quality of life. . . Includes difficulty initiating or maintaining sleep or waking up early with inability to return to sleep.

The causes that originate insomnia are multiple and of a diverse nature, and more than one may coincide in the same subject.

They can be: anxiety, stress, depression (especially from sleep insomnia), sleep disorders (sleep apnea, phase delay, jet lag shift work, restless legs syndrome, parasomnias) , aging, physical exercise or mental stimulation before going to bed, caffeine or other stimulants (energy drinks, tea, cocoa), alcohol, nicotine and other drugs, excessive sleepiness during sleep day ( long naps ), altered sleep-wake pattern, unfavorable environment (noise, light, characteristics of the mattress and pillow...), excessive exposure to intense daylight, hyper thyroidism, alcoholism, alcoholic deprivation or other CNS depressant substances (sedatives, hypnotics, antihistamines, muscle relaxants . . .), intake of stimulant substances (cocaine, amphetamines . . .), effect secondary medication (theophylline, pseudoephedrine...), pain, changes in urinary continence, respiratory changes (COPD. . .) or Idiopathic.

## 23. ACIDOSIS\_

1:00:11

It is a condition in which there is too much acid in the body fluids. It is the opposite of alkalosis (a condition in which there is excess base in the body fluids).

The kidneys and lungs maintain the balance (proper pH level) of chemicals called acids and bases in the body. Acids occur when acid builds up or when bicarbonate (a base) is lost. Acids are classified as:

Respiratory acid occurs when there is too much carbon dioxide (an acid) in the body. This type of acid is generally present when the body is unable to remove enough carbon dioxide from the organism through respiration. Other names for respiratory acid is hypercapnic acid and carbon dioxide acid.

Causes of respiratory acid include: Chest deformities, such as kyphosis, chest lesions, weakness of the muscles in the chest, chronic lung disease, excessive use of sedatives

Metabolic acid is developed when too much acid is produced in the body. It can also occur when the kidneys cannot remove enough acid from the body. There are different types :

- Diabetic acid (also called diabetic ketoacidosis or DKA), which occurs when there is an accumulation of ketone bodies (which are acids) during uncontrolled diabetes.
- Hyperchloremic acid is caused by the loss of too much sodium bicarbonate from the body, which can occur with severe diarrhea.
- Kidney disease (distal renal tubular acidosis and proximal renal tubular acidosis)
- Poisoning with acetylsalicylic acid (aspirin), ethylene glycol (found in antifreeze) or methanol
- Intense dehydration
- Lactic acid is an accumulation of lactic acid. This can be caused by: cancer, drinking too much alcohol, vigorous exercise for a long time, liver failure, low blood sugar (hypoglycemia), medicines such as MELAS (a rare genetic disorder that affects mitochondrial energy production), prolonged lack of oxygen due to shock, heart failure or severe anemia, seizures, sepsis, bacteria or other microbes

serious illness caused by infection

## 24. INFLAMMATION\_

### INFLAMMATIONS\_ 0:55:45

The word inflammation derives from the Latin inflammare, which means to light a fire. Many refer to it as "bloating."

Inflammation is the response of the immune system to foreign invaders such as viruses and bacteria. In response to infection or injury, various classes of white blood cells are transported through the bloodstream to the site of the infection. Infection and request more white blood cells. Inflammation usually subsides when the threat of infection or injury disappears. For example, when a person gets a cut or has the flu, the inflammation is used to kill the bacteria or virus invading the body.

Inflammation can cause: pain, redness, heat, stiffness or loss of mobility.

Inflammation is identified in medicine with the suffix -itis

The biggest problem that arises from inflammation is that the defense is directed towards both harmful and non-harmful agents in a way that causes damage to healthy tissues or organs.

## 25. HYPERTENSION\_

### 0:52:20

Blood pressure is a measurement of the force exerted against the walls of your arteries as your heart pumps blood through your body. Hypertension is the term used to describe high blood pressure.

Blood pressure readings are usually given as two numbers. The top number is called the systolic blood pressure. The bottom number is called the diastolic blood pressure.

For example, 120 over 80 (written as 120/80 mm Hg).

One or both numbers may be too high. (Note: These amounts apply to people who are not taking blood pressure medicines and who are not sick.)

- Normal blood pressure is when blood pressure is less than 120/80 mm Hg most of the time
- High blood pressure (hypertension) is when blood pressure is 140 /90 mm Hg or higher most of the time
- If your blood pressure values are 120/80 or higher, but do not reach 140/90, this is called prehypertension.

**Many factors can affect blood pressure, including:**

- The amount of water and salt that you have in your body.
- The state of the kidneys, the nervous system or the blood vessels.
- Your hormone levels - Aging. This is because the blood vessels become stiffer with age. When this happens, blood pressure rises. High blood pressure increases the chance of having a stroke, heart attack, heart failure, kidney disease, or premature death.

**Most of the time no cause of high blood pressure is identified. This is called essential hypertension.**

**High blood pressure caused by another condition or a medicine you are taking is called secondary high blood pressure and may be due to:**

- Chronic kidney disease.
- After lathes of the adrenal glands (such as pheochromocci takes Cushing's syndrome).
- We are hyperparathyroidism.
- Pregnancy or preeclampsia.
- Medicines such as birth control pills, diet pills, and some cold and migraine medicines.
- Narrowing of the artery that supplies blood to the kidney (renal artery stenosis).

## **26. GASTRITIS\_**

**1:29:01**

**Gastritis occurs when the lining of the stomach becomes swollen or inflamed.**

**It can last only for a short time (acute gastritis) or it can last for months or years (chronic gastritis).**

**The most common causes of gastritis are:**

- Certain medications such as acetylsalicylic acid (aspirin), ibuprofen, or naproxen.
- Drinking too much alcohol.
- Infection of the stomach with a bacterium called *Helicobacter pylori*.
- After autoimmune lathes (such as pernicious anemia).
- Reflux of bile into the stomach (bile reflux).
- Consumption of cocaine.
- Ingest or drink corrosive or caustic substances (such as poisons).
- Is it resected.
- Viral infection, such as cytomegalovirus and the herpes simplex virus (occurs more frequently in persons with a weak immune system).

**Sudden severe illness or trauma, such as major surgery, kidney failure, or being on a ventilator can cause gastritis**

**The symptoms that can be noticed are: loss of appetite, nausea and vomiting pain in the upper part of the belly or abdomen.**

**If gastritis is causing bleeding from the stomach lining, symptoms may include: black stools, vomit blood or material that looks like coffee grounds**

## **27. URINARY INFECTION\_**

### **0.57:56**

**A urinary tract infection (UTI) is an infection of the urinary tract. The infection can occur at different points in the urinary tract, including:**

- Bladder. A bladder infection is also called cystitis or bladder infection.**
- Kidneys        An infection of one or both kidneys is called pyelonephritis or renal infection.**
- Ureters The tubes that carry urine from each kidney to the bladder are only rarely the only site of an infection.**
- Urethra. An infection of the tube that carries urine from the bladder to the outside is called urethritis.**

**Most UTIs are caused by bacteria entering the urethra and then the bladder. The infection most often develops in the bladder, but can spread to the kidneys. Most of the time the body can rid itself of these bacteria. However, certain conditions increase the risk of UTI.**

**Women tend to get them more often because their urethra is shorter and closer to the anus than men. Because of this, women are more likely to get an infection after sex. sexual activity or using a diaphragm for birth control. Menopause also increases the risk of a UTI.**

**The following factors also increase your chances of having a UTI:**

- Diabetes**
- Advanced age and diseases that affect the habits of self-care (such as Alzheimer's disease and delirium).**
- Problems emptying the bladder completely.**
- Have a bladder catheter.**
- Incontinence**



- Enlarged prostate, narrow urethra or any other factor that blocks the flow of urine.
  - Kidney stones -
- Remaining still (immobile) for a long period of time (for example, while you are recovering from a hip fracture).
- Pregnancy.
  - Surgery or other procedure in the urinary tract

**Symptoms of a bladder infection include:**

- Cloudy or bloody urine that may have a strong or foul odor (malodor).
- Low fever in some people - Pain or burning when urinating.
- Pressure or cramps in the lower abdomen or lower back.
- Strong urge to urinate frequently, even shortly after emptying the bladder.

**If the infection spreads to the kidneys include:      symptoms can**

- Chills and shaking or night sweats - Fatigue and general ill feeling - Fever above 101°F (38.3°C)
  - Pain in the side, back or lower leg (groin)
  - Flushed, flushed or hot skin - Mental changes or confusion (in older people, these symptoms are often the only signs of a UTI)
  - Nausea and vomiting -
- Very strong abdominal pain (sometimes)

## **VIRUS (28-39)**

Viruses are very small infectious agents. Because of this, the optical microscope is not enough to see them, but an electron microscope is needed. In addition, unlike bacteria, they can pass through filters with a very small pore diameter.

Viruses are capable of making copies of themselves (of "replicating") in the living cells of the host they infect, and thus can cause disease. The host cells can be those of an animal, a plant, a bacterium, etc.

But these characteristics are not exclusive to viruses, but are also exclusive to some very small intracellular bacteria (that live inside other cells).

What really characterizes a virus is its composition, its structure and its way of replicating.

We call the complete virus (or viral particle) a virion, and it is made up of: - Genetic material inside

it (nucleus) and they are classified into two large groups: \* DNA viruses which take the stage of their development nucleus of the cell in question. Within this category there are, in turn, two classes: single-stranded, in which single-stranded DNA takes center stage, and double-stranded, which in its case has double-stranded DNA.

\* RNA Virus, it is so called because it uses RNA (ribonucleic acid) as genetic material and because it also takes the cytoplasm as a place to proceed with replication.

Within this modality there are four groups: the positive single-chain, the retro-transcribed single-chain, the double-chain and the negative single-chain.

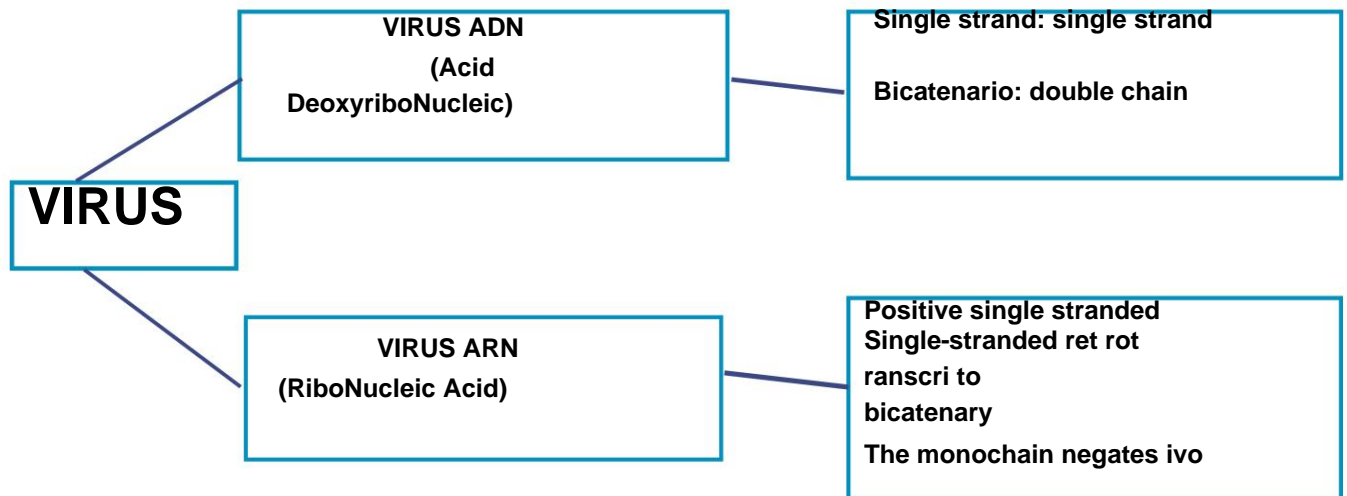
- A protein cover that surrounds the nucleus and is called cap ide.

- Some viruses also have other components, mainly an envelope formed by lipids and carbohydrates.

Some are capable of penetrating into the interior of the cells of our organism; Each virus has a preference for a certain type of cells, thus producing different diseases.

The life cycle of the virus, potentially pathogenic, requires the metabolic machinery of the invaded cell, in order to be able to replicate its genetic material and produce many copies of the original virus. This process can damage the cell to the point of destroying it.

The cells of the respiratory system or those of the mucous membranes (the pharynx, the conjunctiva of the eye, the genital mucosa, etc.) are usually more exposed to virus attack because they are not protected by the skin.



## 28. INFLUENZA VIRUS\_

1:00:00

Influenza (also known as the flu, seasonal flu, influenza A) is a contagious respiratory illness caused by influenza viruses. It can cause mild or severe illness and can sometimes lead to death. The flu is different from a cold. Usually, the flu starts suddenly.

There are four types of influenza viruses: A, B, C, and D.

Influenza A and B viruses in humans cause seasonal epidemics of illness nearly every winter.

Influenzavirus A is a genus of the virus family called Orthomyxoviridae in the classification of viruses. When an antigenic change occurs, it causes episodic influenza in humans and occurs in cycles of between 10 and 15 years. In humans, a more virulent flu generally develops than that produced by minor antigenic variations, which also occur in Influenza B (sometimes they occur simultaneously) and condition seasonal flu, which occurs almost every year.

The emergence of a new and very different virus from influenza A with the ability to cause infection in people can trigger an influenza pandemic.

Influenza type C infections generally cause mild respiratory illness and are not thought to trigger epidemics.

**Influenza D viruses primarily affect livestock and are not thought to cause infection or disease in humans.**

**Influenza preferentially attacks the upper respiratory tract, nose and throat, bronchi and rarely also the lungs.**

**The infection usually lasts for a week. It is characterized by a sudden onset of high fever, muscle aches, headache, severe malaise, nonproductive cough, sore throat, and runny nose. Most people recover in a week or two without requiring any treatment.**

**Influenza constitutes a serious risk to life at the ends of life (childhood and old age) as well as in people who suffer from previous diseases such as: Chronic Respiratory Diseases Diabetes Mellitus, Cancer, Kidney or Cardiological Diseases In these people, the infection can develop severe complications, worsen underlying diseases, even leading to pneumonia and death.**

## **29. HERPES SIMPLEX\_**

### **1:15:48**

**Herpes simplex virus (HSV) is a common human pathogen found throughout the world that causes a wide variety of diseases in children and adults, and, by age forty, more than 90% of the adult population manifests itself. antibodies against this virus**

**HSV transmission can result from direct contact with infected secretions from a symptomatic or asymptomatic host.**

**The herpes implex virus has been characterized in two different serotypes: HSV-1 and HSV-2.**

**While HSV-1 is generally associated with infection of the tongue, mouth, lips, pharynx, and eyes; HSV-2 is primarily associated with genital and newborn infection. In chronic patients (with a weak immune system) and newborns, this viral infection can be serious, although it is rarely fatal. Most herpes infections go unrecognized and are misdiagnosed**

**Most people infected with HSV-1 and HSV-2 show no signs of infection or have minimal symptoms. When signs do show up, they usually do so in the form of one or more blisters on or around of, genitals or face.**

**Cold sores are the most common and have a higher incidence during childhood and adolescence. It is transmitted through direct contact (through saliva) with friends or relatives who carry the virus. Most genital herpes infections are contracted after having sexual contact with a partner infected with HSV-2.**

## 30. HERPES GENITAL\_ 1:01:01

**Genital herpes is a sexually transmitted disease caused by the herpes simplex virus (HSV-2).**

- It can cause sores in the genital or rectal area, buttocks and thighs - It can be spread by having vaginal, anal or oral sex with someone who has it.**
- The virus can spread even when the sores are not present.**
- Mothers can infect their babies during childbirth.**

**The symptoms are commonly called outbreaks. The sores usually appear near the area where the virus entered the body. Sores are blisters that break open and become painful, then heal. Sometimes people don't know they have herpes because they don't have symptoms or they are very mild. The virus can be more serious in newborns or in people with a weakened immune system.**

**The repetition of the outbreaks is common, especially during the first year. Over time, symptoms appear less frequently and are milder. The virus stays in your body forever.**

**Genital HSV-2 infections are more common in women than in men**

**Symptoms :**

**Many people with genital herpes never develop sores but have very mild symptoms . O that they don't even notice or mistake for insect bites or other skin conditions.**

**In cases where signs and symptoms occur during the first outbreak, these can be serious. The first outbreak usually occurs within two days to two weeks of becoming infected.**

**Before the blisters appear, there may be tingling, burning, itching, or pain at the site where the blisters will appear. When the blisters break, they leave shallow sores that are very painful. These sores crust over and heal slowly over 7 to 14 days or more.**

**A second outbreak can appear weeks or months later. It is often less intense and disappears more quickly than the first outbreak. Over time, the number of sprouts may decrease.**

## 31. HERPES ZOSTER\_ 0:59:20

Shingles is caused by a reaction to a primary infection with the varicella zoster virus. After a primary infection, the virus remains inactive in a dorsal root or cranial nerve ganglion. Its reactivation causes typical pain with distribution in dermatomes and vesicular eruption.

Varicella zoster (commonly known as chicken pox) and herpes zoster (commonly known as shingles) are caused by the same herpes virus.

Chickenpox appears with the initial infection and causes a generalized eruption, while herpes zoster occurs after reactivation, years later, and the symptoms are generally localized to a specific dermatome.

You cannot catch shingles from yourself. However, if you have a shingles rash, you can pass the virus on to someone who has never had chickenpox. This often happens in children who might get chickenpox instead of shingles. The virus is spread through direct contact with the rash, and cannot spread through the air.

The first signs of include burning or shooting pain and tingling or itching, usually on one side of the body or face. The pain can be mild or severe. The rashes or blisters appear between one and 14 days later.

If shingles appears on your face, it can affect your vision or hearing. Shingles pain can last for weeks, months, or even years after the blisters have healed.

## 32. EPSTEIN BARR VIRUS\_ 1:00:55

Epstein-Barr virus (EBV) is a virus of the herpesvirus family (a family that also includes herpes simplex virus and cytomegalovirus). It is the major cause of acute infectious mononucleosis, a common syndrome characterized by fever, sore throat, extreme fatigue, and swollen lymph glands. Epstein-Barr virus infection occurs worldwide.

EBV infects most people at some point in their lives.

In this way, adaptive immunity is obtained through the development of antibodies against the virus, which usually prevents new infections due to external factors.

The virus remains latent for the rest of life (as episomes), being able to trigger infections, reactivating intermittently with symptoms.

For its transmission, close personal contact is required and it is transmitted through saliva, in which it remains active for several hours.

For this reason, mononucleosis is also known as "kissing disease" or "lovers' fever".

In crowded human groups, the infection spreads early. Endemic infections among young people in educational institutions (boarding schools, regiments) are frequent.

Virus shedding can occur several months without the individual having symptoms months after infection. The incubation period is 30 to 50 days.

It can cause fever, adenopathies, splenomegaly and pharyngitis. Some cases can be caused by cytomegalovirus, toxoplasma gondii, adenovirus, etc. EBV also produces proliferative syndromes in immunosuppressed patients, and EBV infection is associated with the pathogenesis of Burkitt lymphoma and nasopharyngeal carcinoma.

## 33. CYTOMEGALOVIRUS\_

### 0:56:46

Cytomegalovirus (CMV) is a virus found throughout the world. It is related to the viruses that cause chickenpox and mononucleosis is infectious. Once CMV enters a person's body, it stays there forever.

CMV can be transmitted by direct contact with bodily fluids.

Most people with CMV don't get sick and don't even know they are infected. But infection with the virus can be serious in babies and people with weakened immune systems. If a woman acquires CMV during pregnancy, she can pass it on to the baby.

In general, these babies do not have health problems but there have been cases in which they lead to lifelong disabilities.

This infection is spread by:

- Blood ion transfusion
- Organ transplant
- Drops of breath
- Saliva
- sexual contact
- Urine



## **34. PAPILOMA VIRUS\_ 34. PAPILOMA VIRUS\_ 1:26:18 1:26:18**

**The Human Papilloma Virus (HPV) is the most common sexually transmitted infection (STI). HPV is a different virus than HIV and HSV (herpes). HPV is so common that almost all sexually active men and women will get it at some point in their lives.**

**There are many different types of HPV. In most cases, HPV goes away on its own and does not cause any health problems.  
But when HPV doesn't go away, it can cause health problems like genital warts or cancer.**

**Genital warts usually appear as small bumps or groups of bumps in the genital area. Genital warts can be small or large, flat or raised, and cauliflower-shaped.**

o

**Cancer can usually take years—even decades—to appear after a person has contracted HPV. The types of HPV that can cause genital warts are not the same as those that can cause cancer.**

**There is no way to know who with HPV will develop cancer or other health problems. People with weak immune systems (including people with HIV/AIDS) may be less able to fight HPV and more likely to have health problems from the virus**

**HPV is transmitted sexually, although penetrative sexual intercourse is not necessary for transmission to occur. Direct contact with the skin of the genital area is a recognized mode of transmission.**

## **35. ADENOVIRUS\_ 1:00:26**

**Adenoviruses are a group of viruses that can infect the membranes (lining tissue) of the respiratory tract, eyes, intestines, and urinary tract. They explain about 10% of acute respiratory infections that affect to the infant population and are a common cause of diarrhoea.**

**They affect babies and young children much more than adults Day care centers and schools sometimes have multiple simultaneous cases of respiratory infections and diarrhea caused by adenovirus**

**Adenovirus infections can occur at any time of the year, but are most common in late winter, spring, and early summer.**

**Conjunctivitis and pharyngoconjunctival fever caused by adenoviruses tend to affect older children, mostly in summer.**

**Adenovirus infections can affect children of any age, but most occur in the first few years of life, and most children have contracted at least one before their 10th birthday. There are many different types of adenovirus, so some children may have several repeated infections with this type of virus.**

**The symptoms of adenovirus infections are similar to those of the common cold. Sick children may develop a stuffy or runny nose, as well as a sore throat (pharyngitis), inflammation of the lining of the eyelids (conjunctivitis), infection of the airways in the lungs (bronchitis), pneumonia, a middle ear infection, or fever.**

**Some young people may have a bad cough similar to whooping cough. Sometimes there is bleeding in the lining of the eyes.**

**This virus can cause the eyes to look bad, but vision is not affected. Children infected with some of the adenovirus strains develop inflammation of the stomach and intestinal tract, which can cause diarrhea and abdominal pain (gastroenteritis).**

**This virus can also infect the bladder and cause bloody urine and painful urination.**

**Once a child is exposed to the virus there is an incubation period of 2 to 14 days before they have symptoms**

**The incubation period for gastroenteritis can range from 3 to 10 days.**

## **36. CORONAVIRUS\_**

**1:00:00**

**Coronaviruses (CoV) are a large family of viruses that can cause illnesses ranging from the common cold to more serious illnesses, such as the Middle East respiratory syndrome coronavirus (MERS-CoV) and the one that causes severe acute respiratory syndrome (SARS-CoV).**

Coronaviruses can be spread from animals to people (zoonotic transmission). Based on exhaustive studies in this regard, we know that SARS-CoV was transmitted from civet to human and that MERS-CoV has been transmitted from dromedary to human. In addition, it is known that there are other coronaviruses circulating among animals, which have not yet infected humans.

These infections usually present with fever and respiratory symptoms (cough and dyspnea or difficulty breathing). In the most serious cases, they can cause pneumonia, severe acute respiratory syndrome, kidney failure, and even death.

The usual recommendations to avoid spreading the infection are good hand and respiratory hygiene (covering the mouth and nose when coughing and sneezing) and thorough cooking of meat and eggs.

Likewise, close contact should be avoided with any person who shows signs of a respiratory condition, such as coughing or sneezing.

## 37. VIH VIRUS\_

1:00:34

HIV stands for human immunodeficiency virus. It damages your immune system by destroying infection-fighting white blood cells. It puts you at risk for serious infections and certain types of cancer.

AIDS stands for acquired immunodeficiency syndrome. It is the final stage of infection with HIV. Not all people with HIV develop AIDS.

HIV is usually spread through unprotected sex with an infected person. It can also be spread by sharing needles to inject drugs or by contact with the blood of an infected person. Women can infect their babies during pregnancy or delivery.

The first symptoms of HIV infection may be swollen glands and flu-like symptoms.

These may come and go within two to four weeks. Serious symptoms may not appear until months or years later.

Strategies to reduce the risk of HIV infection include limiting the number of sexual partners never sharing needles and using condoms the correct way every time you have sex

## 38. COXAACKIE VIRUS\_

### 1:00:34

The Coxsackie virus belongs to the family of enteroviruses (which also includes polioviruses and hepatitis A virus), which live in the digestive tract of humans. These viruses can be transmitted from one person to another, usually through contact with dirty hands or surfaces contaminated with feces where they can live for several days. Mild symptoms are similar to those of the flu, which disappear without treatment. But in some cases they can cause more serious infections: sudden high fever, headache and muscle aches, sore throat, abdominal discomfort or nausea, viral meningitis, encephalitis, myocarditis.

## 39. BX VIRUS CANCER\_

### 1:00:34

Cancer is not an infectious disease like tuberculosis is typhoid fever, cholera, pneumonia, etc. It is not transmitted by contact. It is not caused by germs coming from outside.

However, certain viruses are known to cause cancer in experimental animals. The virus is an extremely small germ that cannot be seen with a normal microscope.

Dr. Royal Rife was a true researcher and a genius. In the early 1920s, he developed a special microscope, which could magnify objects to about 25,000 times, which could easily study very small viruses. Blood and tissue cells from various cancer patients are then studied. with

He discovered that there were very small living particles inside the cells of cancer patients. He named it vi rus BX. By studying a large number of patients and healthy individuals over a long period, he concluded that these viruses did not come from outside the body. These viruses developed within cells. It proved the trans formation of pre-existing harmless bacteria into disease-causing bacteria and viruses. This was in response to the accumulation of toxic waste products within tissues.

All living cells in the body always have such small harmless living particles called prot ids We are all born with prot ids inside our cells, which remain quiet and harmless until something goes wrong. These protides then change their harmless form and become disease-causing microorganisms Rife demonstrated that, under toxic and unhealthy conditions, certain harmless bacteria assumed different forms and became viruses, bacteria, fungi , etc. harmful which caused different diseases due to the accumulation of toxins and waste products in the cells of different parts of the body. He concluded that exposure to carcinogens slowly alters the constitution and prepares the body for cancer. BX viruses then grow inside the body and invade cells to cause cancer.

## BACTERIA (40-54)

The word bacteria comes from a Greek term meaning "rod." It is a prokaryotic unicellular microorganism that can cause fermentation diseases or putrefaction in living beings or organic matter.

Because they are prokaryotic cells, they lack a nucleus or internal organelles. On the other hand, although the term comes from rod, bacteria can be shaped like a rod, sphere or helix.



Bacteria can be classified into various groups based on different criteria. Thus, for example, if we start from what its form is, we find that there are four clearly delimited types:

- **Bacilli**: they are the bacteria that are defined by being elongated and because they have the possibility of being curved or straight. In the same way, it is necessary to underline the fact that they may or may not have flagella.
- **Leptothrix**: large-sized are those that are framed under this denomination and have as their main sign the identity that they can present filaments called septate -
- **Spiroles**: in this case, under said category are included the bacteria that have a curved appearance helical.
- **Cocci**: the bacteria that receive this name are those that have a rounded shape and have the possibility that they can be isolated in pairs or in the form of a clustered chain.

In addition to all of the above, we must also underline the fact that bacteria can be classified based on what their respiration is. In this case, we could make two large groups:

- **The aerobic**, which are those that make use of oxygen - **The anaerobic**, which do not use that but other elements such as carbonate, for example.

Third, we can determine that bacteria can be equally classified taking into account what their growth needs are. A fact is that it would lead to find two types of bacteria:

- **The heterotrophs** (parasites of putrefaction, symbiotics...)
- **The autotrophs** (intensifying photos, integrating chemi s...)

**Bacteria can live in any habitat; some species even survive in outer space.**

**These characteristics make bacteria the most abundant organism in the world: 40 million bacterial cells can coexist in just one gram of soil.**

**The human body harbors about ten bacterial cells for every human cell. The immune system allows most bacteria to be harmless or even beneficial (they help digestion, for example).**

**However, certain bacteria can cause serious diseases such as tuberculosis, leprosy and cholera.**

**The discipline responsible for the study of bacteria is known as bacteriology. It is a branch of microbiology, the science dedicated to studying microorganisms Bacteriology and microbiology belong to the field of biology.**

**These scientific fields have advanced thanks to technological advances, although it is estimated that we know only 1% of the microbes in the biosphere.**

## **40, MYCOPLASMA PNEUMONIAE\_1:05:20**

**Caused disease: Atypical pneumonia and tracheobronchitis**

**Mycoplasma pneumonia: it is an infection of the lungs and causes diseases of the respiratory system.**

**This type of pneumonia is also known as atypical pneumonia because the symptoms are different from pneumonia due to other common bacteria.**

**Causes:**

**Mycoplasma pneumonia usually affects people under the age of 40.**

**People who live or work in crowded areas such as schools and abandoned homes are more likely to develop this condition. However, many people who get it do not have any known risk factors.**

### **Symptoms:**

Symptoms are often mild and appear over a period of 1 to 3 weeks. In some people they may become more severe.

## **41. STAPHYLOCOCCUS AUREUS\_ 0:58:04**

**Produced disease: Nosocomial infections**

**Staphylococcus aureus or Staph is the abbreviated name in English for staphylococcus, a type of bacteria. There are more than 30 types, but staphylococcus aureus is the one that causes the most infections, among them:**

- Skin infections
- pneumonia
- Food poisoning
- Toxic shock syndrome
- Blood poisoning (bacteremia)

Skin infections are the most common. They may look like pimples or boils. They may appear red, inflamed, and painful, and sometimes have pus or other discharge.

They can progress to impetigo, which becomes a scab on the skin, or cellulitis, a red, inflamed area of skin that feels hot to the touch.

Anyone can get a Taph skin infection.

You are more likely to get an infection if you have a cut or scrape, or are in contact with a person or surface that has the bacteria on it. The best way to prevent infection is to keep wounds clean and wash your hands.

## **42. BETA STREPTOCOCCO\_ 1:06:40**

**Produced disease: Meningitis in neonates and disorders of pregnancy in women**

**St. reptococcus agalactiae. It is t group B reptococci**

It is a bacterium that can be found in the digestive system of any human being. In women it can sometimes colonize the vagina and urinary bladder.

The incidence of this disease is relatively low, from 0.5 to 1.5 cases per 1,000 births, but it causes severe infections in the newborn that can be life-threatening, with a mortality of 20% in babies. infected



In newborns, they can cause blood infections, pneumonia, and meningitis. Medical examination during pregnancy may indicate the presence of the bacteria. If it is positive, intravenous antibiotics during delivery can save the baby's life.

Adults can also get group B streptococcal infections, especially if they are elderly or have other health problems.

They can cause urinary tract infections, blood, skin infections, and , infections in the pneumonia.

## 43. NOISE OF PNEUMONIA\_ 1:01:44

Disease produced: Pneumonia

*Streptococcus pneumoniae*, colloquially known as pneumococcus, is a pathogenic strain of the bacterium *Streptococcus*.

As its name implies, *Streptococcus pneumoniae* is closely related to the disease pneumonia, which is an inflammatory condition of the lungs.

A more serious medical condition occurs if the pneumococcus from the lungs passes into the blood and spinal fluid. This streptococcus bacterium is transmitted from one sick person to another through contact with respiratory secretions.

Pneumococcus is identified as one of the main causes of lobar pneumonia. Along with some other pathogenic bacteria, fungi are responsible for causing respiratory disease. In addition to pneumonia, infections with pneumococcus include sinusitis, meningitis, empyema, bacteremia, peritonitis, cellulitis, otitis media, and meningitis.

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In a healthy person, pneumococcus is present in the upper respiratory tract (nose and throat) and contributes to the population of the flora of the nasopharyngeal area. However, this bacterial strain multiplies repeatedly in favorable growth conditions and spreads to other parts of the body, causing widespread infection. In summary, *Streptococcus pneumoniae* is virulent when a person's immune system is compromised, or when natural defenses of the body are too weak to counteract the rapid growth of bacteria. Therefore, the disease of pneumonia occurs mainly among children, the elderly and those who have been diagnosed with the disorders chronic

The typical symptoms of the infection are cough, high fever, shortness of breath, rapid breathing and pain in the chest area, yellowish and/or bloody expectoration. Other associated signs include headache, fatigue, muscle pain, nausea, and vomiting.

## 44. STREPTO PYOGENES\_0:57:34

Produced disease: Scarlet fever, tonsillitis, impetigo

pyogenes.

Streptococcus group A cause: Streptococcus

- Infection in the throat: sore throat, redness, sometimes with white platelets on the tonsils
- Scarlet fever: red rash on the body
- Impetigo: skin infection
- Toxic shock syndrome
- Cellulitis fasciitis necrotizing (necrotizing disease)

The initial typical symptoms of the disease are headache, sore throat, chills, fever, tonsillitis erythema and general malaise. Two to three days after the appearance of the first symptoms, reddish spots are observed on the palate and a bright red swelling of the papillae of the tongue, which is called raspberry tongue due to its characteristic appearance.

A typical skin eruption appears on the trunk, which usually extends to the entire body surface with the exception of the face. The rash blanches with pressure. The fever, which often rises to between 40° and 40.6°C, lasts only a few days, although it can last for a week or more. The rash usually pales after about a week, at which time the skin begins to flake

## 45. PSEUDOMONA AERUGINOSA\_1:11:01

Produced disease: Otitis externa (swimmer's ear), folliculitis hot bath and nail diseases mainly in divers patients with burns or injuries

They also cause infections in

*Pseudomonas aeruginosa* is a rod-shaped flagellated bacterium that produces fluorescent pigments of colors that can vary from red to black. It is a very widespread bacterium, and can be found in water, soil, animals or plants, since its nutritional needs are minimal, although the diseases caused by this bacterium are associated with its preference for humid environments. In humans it can be found in the most humid areas of the body, such as the armpits.

the ears and the area around the anus.

The disease originates as a result of alterations in the normal defenses of the host. This may involve the loss of protection provided by the mucous membranes or the skin, as occurs with "otitis externa". Its minimal needs for nutrition, adaptability and relative resistance to antibiotics allow this bacterium to survive close to its host.

**Pseudomonas aeruginosa** infections are serious, especially when there is bacteremia. This usually occurs in patients with severe underlying disease, long hospital stay, and previous use of antibiotics

**Symptoms:** itching in the auditory canal, strong ear pain, suppuration of yellow-green pus in the opening, inflammation of the soft tissues and lymph nodes, slight fever.

## **46.ESCHERICHIA COLI\_0:57:49**

**Disease produced : Diarrhea**

It is a type of bacteria that lives in the intestine. Most *E. coli* cause no problems, but some types can cause illness and cause diarrhea due to a disturbed bowel rhythm. One of them causes traveler's diarrhea.

Loss of fluids can lead to dehydration.

The worst kind of *E. coli* causes bloody diarrhea and can sometimes cause kidney failure and even death. This, in general, occurs in children and in adults with weakened immune systems.

*E. coli* infections can be acquired by eating foods that contain the bacteria. Symptoms may include: severe nausea or vomiting abdominal cramps watery or bloody diarrhea, tiredness, fever. . .

To avoid food poisoning and prevent infection, handle food safely. Thoroughly cook meats, fruits and vegetables before eating or cooking and avoid unpasteurized milk and juices. The infection can also be acquired by swallowing water in a swimming pool contaminated with human waste.

## **47. BORRELIA BURGDORFERI\_1:00:20**

**Produced disease : Lyme disease**

*Borrelia burgdorferi* is a species of bacterium in the class Spirochaetes, it is the agent of Lyme disease. This is a zoonotic disease transmitted by ticks of the genus *Ixodes*, whose animal reservoir is made up of wild rodents (with the exception of common mice and rats) and deer

**Important facts about tick bites and Lyme disease: - A tick has to remain attached to your body for 24 to 36 hours to transmit the bacteria to your blood.**

**- Blacklegged ticks can be so small that it is almost impossible to see them. Many people with Lyme disease never even see or feel a tick on their body.**

**- Most people who are bitten by a tick do not get Lyme disease.**

**Symptoms of Lyme disease: Stage 1: Early and localized.**

**They begin**

**days or weeks after infection. They are similar to the flu and may include: Symptoms: Fever and chills General malaise, headache, joint pain, muscle aches, stiff neck.**

**A "cockade-shaped" rash, a flat or slightly raised red patch, may occur at the site of the tick bite, often with a clear area in the center. This lesion can be quite large and expand in size. This eruption is called the migratory theme.**

**Symptoms can appear and disappear.**

**Stage 2 :**

**Early in spread, they can occur weeks to months after the tick bite and can include:**

**Numbness or pain in the area of the nerve, paralysis or weakness in the muscles of the face, heart problems, such as an irregular heartbeat (palpitations), chest pain or shortness of breath.**

**Stage 3:**

**Late-spreading, can occur months to years after infection. The most common symptoms are muscle and joint pain. Other symptoms may include:**

**Abnormal muscle movement, joint swelling, muscle weakness, numbness and tingling, speech problems, thinking (cognitive) problems.**

## **48. Spirochetes\_ 0:33:20**

**Produced disease: syphilis**

**Spirochetes are bacteria that have morphological characteristics and locomotion organs that differentiate them from the rest of the bacteria.**

The Spirochaetes phylum is divided into families all included in a single order, Spirochaetales. Medically important members of this phylum are:

- Leptospira, which causes leptospirosis or Weil's disease.
- Borrelia burgdorferi, which causes Lyme disease.
- Borrelia recurrentis, which causes relapsing fever.
- Treponema pallidum, which causes syphilis
- Brachyspira, which causes intestinal spirochetosis.

## 49. GONORRHEA\_

### 1:05.00

Disease produced: Gonorrhea or gonorrhea

Gonorrhea, also called gonorrhea, gonorrhea and gonorrhea, is a sexually transmitted infection (STI) caused by the bacterium *Neisseria gonorrhoeae* or gonococcus, whose specific host is humans. It mainly affects the mucous membranes of the genital and urinary systems, but it can also affect the ocular conjunctiva, pharynx, and rectum. Its most common characteristics are purulent discharge from the urethra in men and the consequence of infertility in women. It can be contracted by contact with the mouth, vagina, penis, or anus.

Bacteria thrive in warm, moist areas of the body including the tube that carries urine out of the body (urethra). In women, the bacteria can be found in the reproductive system (which includes the fallopian tubes, uterus, and cervix). The bacteria can even grow in the eyes.

Gonorrhea symptoms often appear 2 to 5 days after infection. However, in men the symptoms can take up to a month to appear. Some people have no symptoms; they may be completely unaware that they have acquired the disease and therefore do not seek treatment. This increases the risk of complications and the chance of transmitting the infection to another person.

Symptoms in men include: pain and burning when urinating, increased urinary frequency or urgency, discharge from the penis (white, yellow, or green in color), red or swollen opening of the penis (urethra), testicles tender or swollen sore throat (gonococcal pharyngitis).

The symptoms in women can be very mild and can be confused with another type of infection. These symptoms include: pain and burning when urinating, sore throat, painful intercourse severe pain in the lower abdomen (if the infection spreads to the fallopian tubes and stomach area), fever (if the infection spreads to the fallopian tubes and stomach area).

If the infection spreads to the bloodstream, symptoms include: fever, rash, arthritis-like symptoms, abnormal greenish or yellowish vaginal discharge, or a foul-smelling discharge.

## **50. CHLAMYDIA PNEUMONIA\_ 1:15.03**

**Caused disease:** atypical pneumonia, atherosclerosis, risk of acute myocardial infarction.

It causes lung infections and is spread in the same way as any other respiratory disease. They are spread from person to person directly by coughing, sneezing, and indirectly by germs on hands or other objects.

They can cause prolonged coughing, bronchitis, and pneumonia as well as sore throats, laryngitis, ear infections, and sinusitis. They usually begin gradually with a sore throat followed by a cough about a week or more later.

The cough can last from 2 to 6 weeks.

## **51. CHLAMYDIA TRACHOMATIS\_ 1:03.51**

**Disease produced:** Conjunctivitis, trachoma and blindness, oculogenital infections and pneumonias syndrome of Reiter (Urethritis (sexual transmission disease), arthritis, conjunctivitis, venereal lymphogranuloma).

**Symptoms of trachoma:** Inflammation of the conjunctiva.

This is a mucous membrane that covers the inner surface of the eyelids and the outer surface of the eyeball on its anterior face (except for its anterior pole, where the cornea is located). Conjunctivitis can be caused by an infection, allergy, or trauma.

It is characterized by redness, inflammation, a foreign body sensation when blinking, and excessive sensitivity of the eye to light (photophobia). In severe cases, a thick mucous exudation occurs. If the cause is an infection, a discharge of pus occurs.

## 52. HELICOBACTER PYLORI\_1:10:41

**Produced disease:** Infection in the stomach (gastritis duodenitis peptic ulcers (duodenum and stomach), stomach cancer, lymphoma of the stomach (MALT lymphoma).

It is a bacterium that has the incredible capacity to survive in one of the most inhospitable environments of our organism: the stomach, which presents an extremely acid environment, with a pH lower than 4. The acidity of the stomach is one of our body's defense mechanisms against bacteria that are ingested with food. Few living beings manage to survive in such an acidic environment.

However, H. Pylori presents some evolutionary «tricks» that allow it to adapt to such a hostile environment. The bacterium produces substances that neutralize acids, forming a kind of protective cloud around it, allowing it to move inside the stomach until it finds a point to settle. In addition to this protection, it manages to overcome the mucus barrier that the stomach has to protect itself from its own acidity, adhering to the mucus, an area under the mucosa, where the acidity is much less intense. Therefore, in addition to producing substances against acidity, H. pylori manages to penetrate the stomach to parts where the environment is less aggressive.

It is found in approximately two-thirds of the world's population. It is possible that it is transmitted through contaminated water and food. The symptoms are: abdominal pain, nausea, loss of appetite, swelling, involuntary weight loss. . .

Blood, breath, or stool tests are often done to see if it contains H. Pylori.

To prevent infections it is advisable:

- Wash your hands after using the bathroom and before eating - Eat properly prepared food.
- Drink water from clean and safe sources.

## 53.SALMONELLA\_ 0:59:43

**Produced disease:** Salmonella is

Salmonella is the name of a group of bacteria found in raw poultry, eggs, beef, and sometimes unwashed fruits and vegetables. It can also be acquired after handling pets, especially reptiles such as snakes, turtles, and lizards.

**Symptoms include: Fever, diarrhea, abdominal cramps, headache, nausea, vomiting, and loss of appetite.**

**Symptoms usually last four to seven days Can be diagnosed with a stool test Most people get better without treatment. It can be more serious among the elderly, young children, and people with chronic illnesses. If salmonella gets into the bloodstream, it can be serious.**

**Typhoid fever, a more serious disease caused by salmonella, occurs frequently in developing countries.**

**Any person can contract salmonella is The most vulnerable are children under 5 years of age and older people or people who have low defenses, such as those who are undergoing treatments to cure cancer or treat AIDS.**

## **54.LEGIONEL\_**

**1:00.32**

**Produced disease: Legionnaire's disease or legioneli sis**

**Legionella, legionella or legionellos is a lung infection caused by some bacteria of the Legionellaceae family, especially Legionella pneumophila (which is responsible for 90% of cases), which is characterized by pneumonia with high fever. Also known as Legionnaires' disease: its name derives from the fact that the original outbreak of this bacterium occurred during an American Legion Convention in Philadelphia, in 1976.**

**Another non-pneumonic clinical form can also occur, known as 'Pont iac fever', which manifests as an acute and self-limited febrile syndrome.**

**It can lead to pulmonary complications. Its symptoms are: fatigue, difficulty breathing and sometimes diarrhea or muscle aches**

**The biggest source of contagion is the water system of hotel and hospital buildings, humidifiers, spray machines, spas and thermal watersources. Air conditioning systems are also a relevant source of Legionella.**



## PARASITES (55-72)

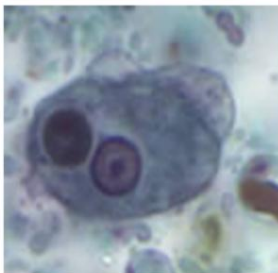
The human species is currently heavily infested with parasites  
Each one of us has dozens of different parasites.

A parasite is an organism that lives on or in a host organism and feeds at the host's expense.

There are three major classes of parasites that can cause disease in humans:

### 1 . Protozoa

Protozoa are microscopic unicellular organisms that can be free-living or parasitic in nature. They are capable of multiplying in humans which contributes to their survival and also allows serious infections to develop from just one organism. The transmission of protozoa living in the human intestine to another human being generally occurs via the fecal-oral route (for example, contaminated food or water or person-to-person contact). Protozoa that live in human blood or tissue are transmitted to other humans by an arthropod vector (for example, by the bite of a mosquito or midge).



Entamoeba histolytica es un protozoo.  
You need a microscope to see this bird.

### 2. Helminths

Helminths are large, multicellular organisms that are usually seen unobserved as adults. Like protozoa, helminths can be free-living or parasitic in nature. In their adult form, helminths cannot multiply in humans.

There are three major groups of helminths:

- Flatworms (flatworms): include flukes (flukes) and caes all (tapeworms).
- Spiny-headed worms (acanthocephali): the adult forms of these worms reside in the gastrointestinal tract.  
Acanthocephalans are thought to be an intermediate form between caes all and nematodes.

- Cylindrical worms (nematodes): the adult forms of these worms can reside in the gastrointestinal tract, the blood, the lymphatic system or subcutaneous tissues. On the other hand, the immature stages (larvae) can cause diseases by infection of various body tissues. Helminths are considered by some to also include segmented worms (annelids); the only medically important ones are leeches.

It should be noted that these organisms are not usually considered parasites



Gusano Ascaris lumbricoides adult.  
It can measure between 15 and 35 cm.

### 3. Ectoparasites

Although the term ectoparasites can broadly include blood-sucking arthropods, such as mosquitoes (because they depend on the blood of a human host for food and survival), this term is often have a narrower sense that refers to organisms such as ticks, fleas, lice and mites, which adhere to or burrow in the skin and remain there for relatively long periods (weeks to months). Arthropods are themselves major disease causes, but they are even more important transmitters of many different pathogens as vectors that, in turn, cause enormous morbidity and mortality from the diseases they cause.



Adult louse.  
Its actual size is approximately that of a sesame seed.

We are and have been perfect recipients of parasites. Our body is large enough to provide food and shelter for a large number of them. The fact that we cannot see or apparently notice them makes us mistakenly assume that we do not see them. we have But there they are feeding on the best of our cells, biting, chewing, swallowing and leaving their toxic residues inside our organism.

Today the incidence of different types of parasites in certain diseases is demonstrated.

**But not only the parasite itself is the cause of them, but also the viruses and bacteria that come with them. When their presence is numerous, they can make us sick.**

**In modern society, there has been a notable increase in all of them due to the establishment of a biological reservoir in cattle, poultry, and domestic animals.**

**Our ancestors knew that men had parasites just like any other animal. Until a short time ago, frequent purges that included diarrhea and vomiting were made to get rid of these little invaders. There are still cultures that preserve this tradition and some of us can remember how they forced us to drink some of their tance that served to clean the intestine of worms or other types of parasites. Why have we abandoned these wise practices that have been helping man since time immemorial?**

**Some of the symptoms are: constipation, diarrhea, distension of the abdomen, damage to the immune system, allergies, leaky gut, anemia. high levels of eosinophils and IgE, apathy, sleep disturbances, teeth grinding, muscle wasting, tumors, impaired immune eczema, system function, impaired cognitive ability, difficulty concentrating se, dermatitis and rashes and nerves i sm, etc.**

....

#### **General measures to prevent intestinal parasites**

- 1. Wash hands with plenty of water before preparing food or eating and after using the bathroom.**
- 2. Wash raw fruits well (organic the vegetables and greens that are eaten ones too).**
- 3. Daily throw the garbage from the houses; thus, breeding grounds for flies, rats or cockroaches that transmit diseases are avoided**
- 4. In those places where there is no drinking water, boil it for 10 minutes or put sodium chlorite (3 drops of chlorite for each liter of water).**
- 5. Wearing footwear to avoid hookworms is**
- 6. Feed yourself properly in a balanced way.**
- 7. Keep the house (floors, walls and surroundings) clean and dry.**
- 8. Avoid contact of the hands and feet with the mud, as well as with the earth or sand, from those places where it is known or suspected that there is fecal contamination.**
- 9. Avoid eating food from street vendors and places with poor hygienic conditions.**
- 10. Desparas i tation: see Andreas Kalcker's protocol.**

#### **"Biot rohn eliminates parasites and blood cough"**

**During the first week do the treatment once a day every day and twice if possible. The second week day yes and day no; the third and fourth week, once a week as maintenance.**

## 55. ASSARIS LUMBRICOIDES / NEMATODO\_1:01:17

It is a parasite known as an intestinal worm, due to its elongated shape that resembles an earthworm. Produces roundworms

Form of transmission: by oral-fecal route, that is, through dirt or by having touched something dirty and having subsequently put their fingers in their mouths. Given that children touch everything and then put their hands to their mouths, it is not surprising that they are more at risk than adults of becoming infected with these parasites.

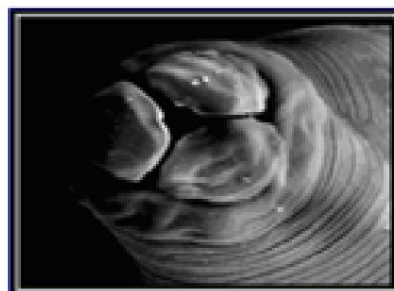
Once in the intestine, an *Ascaris* can measure between 20 and 30 cm in length. It does not need an intermediate host to complete its life cycle.

Adult worms can cause complications when they migrate to certain organs such as: the appendix, the bile duct, the pancreas.

*Ascaris* are among the largest nematodes. They are whitish parasites, without a mouth capsule and with a mouth with a small opening surrounded by three lips.



Hembra (≈ 40 cm)



Parte anterior  
adulto (SEM)

## 56. TOHORLASMA\_ 0:55:20

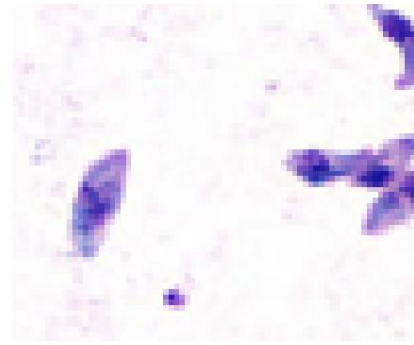
It is a species of parasitic protozoan that causes toxoplasmosis; a disease that is generally mild, but can complicate and become fatal, especially in cats and human fetuses

Mode of transmission: infection in humans can come from:

- Transfusions of infected blood or organ transplants - Drinking contaminated water.
- Handling feces from an infected cat.
- Using utensils or cutting boards that are in contact with raw meat - Eating raw or undercooked meat (lamb, pork or beef).

**Toxoplasma also affects people who have weakened immune systems**

**Most people with toxoplasma need treatment.**  
no



## 57. OXIUROS\_1:08:06

**Enterobius vermicularis is a small parasitic helminth of man popularly known as pinworm (worms). It causes the intestinal disease known as threadworm isopiduyes whose correct name is enterobiasis**

**Enterobius vermicularis is the helminth with the greatest geographical distribution, affecting 30% of school-age children.**

**Although there may be gastrointestinal disturbances due to the presence of the worm in the intestinal cavity, anal itching is the most prominent symptom. In addition, frequent scratching can cause abrasions in the area and give rise to a secondary bacterial infection.**

**This stops and could cause bruxism.**

**Fulminant appendicitis may occur; Since the adult's habitat is the cecum, it may itself migrate to this area.**

**Symptoms: menstrual difficulties, hormonal imbalances endometriosis, appendicitis uterine, sexual problems hyperactivity in children enuresis (wetting the bed), ATM (ataxia gene), back pain, vaginal problems.**

**It feeds on hormones**

**Transmission and reproduction is greater during reproductive cycles**

**It can cause major disorders of the nervous system. In relation to the foci in the upper jaw and the TMJ causing cancer.**



## 58. DUELA DE NIGADO (Fasciola hepatica)\_1:00:00

The liver fluke is a flatworm, segmentless, fleshy, measuring 2-3.5 cm long by 1-1.5 cm wide. It is whitish in color and has shades ranging from ash to brownish colors.

It is also called Fasciola Hepatica, a metazoan parasite of domestic cattle, cattle, sheep, goats and also of man. This animal has a flattened body, which is why it is studied as a flatworm.

The fluke is a hermaphroditic animal, that is, both sexes are found in the same individual. The eggs, which are constantly produced, leave the fluke, pass through the bile ducts into the host's intestine and are expelled in feces. The way to avoid this parasite results from the knowledge derived from its evolutionary cycle. Contaminated water and aquatic plants that, like watercress, are consumed by man constitute the vehicle for infection.

The existence of the fluke in the liver produces the disease called Dystomatosis, which entails the following symptoms: anemia, discomfort in the liver and obstruction of the ducts. Crohn's disease, multiple sclerosis, myopathy, biliary endometriosis, joint pain, circulation problems, strong allergies. Like alcohol and lead.

## 59. DIROFILARIA\_ 0:47:30

Dirofilaria immitis is the name of a parasitic nematode of the dog, which is its definitive host, but can infest cats, cattle, ferrets, sea lions and, very rarely foxes, coyotes, to man.

The reproductive stage of the life cycle of the adult parasite resides mainly in the pulmonary arteries and the right ventricle of the animal heart, where they can live for many years causing canine heartworms.

Infection of the heart can result in serious disorders for the host.

It is transmitted by the bite of a mosquito and in humans it forms a lesion in the lung that can cause thrombi and, very rarely, in the heart. The lung lesion is seen on lung radiography as granulomatous lesions in the shape of stacks of coins much like a malignant lesion would look, sometimes requiring operations that reveal a parasitic infection rather than cancer.



There are no laboratory tests that diagnose a heartworm is in the image, the heart of a German shepherd infested with worms of the species *Dirofilaria immitis*

## 60. PHYSICAL USE / Fasciolops is Buski (Intestinal Duel) \_0:29:4

*Fasciolops* is the parasite produced by the largest intestinal fluke: *Fasciolops buski*. This intestinal parasite is common in humans and pigs, since it frequently parasitizes both species in endemic areas.

It is a fluke morphologically very similar to *Fasciola hepática*, although *F. buski* is larger, since adults range from 20-75 mm long by 8-20 mm wide.

This worm is fleshy, elongated, ovoid, and externally it is covered by a spiny integument.



Once the man ingests the eggs of *Fasciolops buski*, an incubation period of approximately 3 months must elapse until they become adults. These adults settle mainly in the duodenum and jejunum, causing a ulceration in the mucosa and rupture of the capillaries.

If the infestations are more intense, the parasite can become attached to the walls of the large intestine.

Although most infections are asymptomatic when symptoms appear, they are mostly linked to the attachment of the parasite to the walls of the intestine. Thus, the first symptoms are gastrointestinal irritation, nausea, pain in the upper abdomen, diarrhea that alternates at first with periods of constipation, and anorexia.

Higher intensity infections cause edema of the face and body, ascites, anemia, weight loss and diarrhea with abundant deposition of feces in which undigested food can be observed: malabsorption syndrome. With the passage of time, severe asthenia may appear and if the number of parasites is very high, the pylorus may become clogged, which may even cause the death of the parasitized individual. Like Geopathic stress, cancer, endometrial is IBS, MS, muscular, dystrophia, arthralgias, Epstein Barr.

HIV, hepatitis and virus

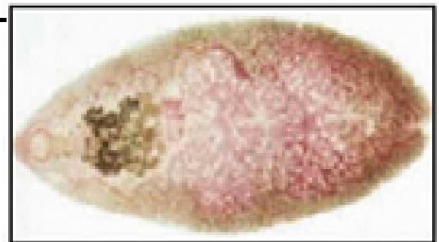


## 61. GIARDIA LAMBLIA\_ 0:59:20

*Giardia lamblia*, intestinalis or duodenalis is a pathogenic flagellate protozoan belonging to the order Diplomonadida that parasitizes the digestive tract of humans and other mammals, producing a pathology called giardiasis. *Giardia lamblia* lives in the form of trophozoite in the lumen of the small intestine (mainly in the duodenum) attached to the intestinal villi by means of the bilobed discs. It feeds and reproduces until the intestinal content begins the process of dehydration, moment in which the encysting of the trophozoite begins.

The parasites can be carried to the mouth, by dirty hands or by flies that contaminate the food where they stop. The larvae reach the stomach and then pass to the small intestine, where they stick to the walls causing diarrhea and strong stomach pains.

The symptoms produced by a giardiasis can be from non-existent to presenting severe symptoms. In the event that the infection occurs with symptoms, these appear after an incubation period that lasts around 1-3



weeks, and consist mainly of mucous diarrhea without traces of blood and meteorism, abdominal pain and anorexia (symptom).

In the most severe cases, malabsorption syndrome can be produced, due to the destruction of the epithelial cells of the small intestine.

It is the only common protozoan found in the duodenum and jejunum.

## 62. TRYPANOSOMA CRUZ\_ 1:00:21

It produces the so-called Chagas disease in America. The dissemination of *T. cruzi* occurs through contact with the feces of insects of the Hemiptera type, of the genus Triatoma, the parasites entering through the wound caused by their bite;

They reach the bloodstream (metacyclic trypomastigote form) traveling to different organs and tissues, replicating mainly in muscle and nervous tissues (trypomastigotes).



They can produce chagasic heart disease, irreparable damage to the myenteric plexuses of the gastrointestinal tract, causing the person to present megaesophagus, megacolon and eventually die, in addition to all this the person may not present symptoms what that benefits the parasite since over time it will be more pathogenic.



## 63. STRONGYLOIDES\_

0:57:06

*Strongyloides stercoralis* is a nematode that produces strongyloidiasis. Its location in humans is in the small intestine.

They are parasites with worldwide distribution, especially in the tropics. Its location is usually in the mucosa of the proximal third of the small intestine.

Strongyloidiasis is an intestinal tissue parasite caused by the nematode *Strongyloides stercoralis*. It is an important human disease in immunocompromised people.



## 64. TRICHOMONAS VAGINAL\_1:04:20

*Trichomonas vaginalis* is a flagellated protozoan pathogen belonging to the order Trichomonadida that parasitizes the urogenital tract in both females and males, but only in humans. It produces a hemorrhage called trichomoniasis urogenital.

- In women, the infection is limited to the vulva, vagina and cervix, rarely extending to the interior of the uterus. The mucous membranes may be hypersensitive, eroded and covered with a yellow, frothy or colored discharge.                      inflamed

cream.

The signs and symptoms are, in addition to intense vaginal discharge, local tenderness, vulvar itching and a burning sensation.

- The male can infect the seminal vesicles and the urethra.

great aunt

About 10% of infected men have a thin, white urethral discharge.

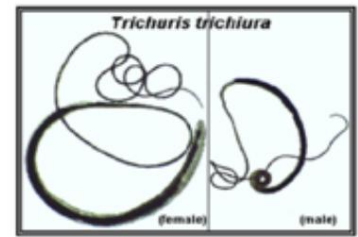
Trichomoniasis (or "trich") is a sexually transmitted disease (STD) very common caused by infection transmitted by the protozoan parasite called *Trichomonas vaginalis*. The symptoms of the disease can vary, and most men and women who have the parasite do not know they are infected.



## 65. TUESDAY\_ 1:00:00

*Trichuris trichiura* or trichocéfalo is a parasitic species of nematode of the order Trichurida, causal agent of the parasite is known as tricuriasis. Also known as whip worm, due to its very thin anterior part and its posterior part wider, like the handle.

*Trichuris trichiura* is white, the female measures 35-50 mm and the male 20-25 mm long. The intestinal mucosa becomes inflamed and edematous. Each adult whipworm consumes 0.005 ml of blood per day and very high loads of this parasite cause severe anemia.



Adultos (gusano látigo)

Hemorrhage at sites where the parasites are attached also contributes to anemia in large cases.

When the rectum

becomes edematous, straining during defecation causes rectal prolapse. Sometimes some adult parasites invade the appendix and cause appendicitis in certain cases diarrhea occurs secondary to bacterial invasion when many whipworms are obtained. The anterior end has a buccal capsule with lancets that allow it to anchor in the colon, its natural habitat. At the posterior end is the genital apparatus,

straight in the female and curved in the male.

Causes intestinal and joint problems, anemia, colitis with blood and phlegm

them

## 66. ECHINOCOCCUS\_

00:55:00

*Echinococcus* is a genus of cestodes, all belonging to the Taeniidae family, which parasitizes carnivores in their adult phase (generally canids) and a wide variety of herbivores and omnivores in the larval phase, generally in the liver and lungs, although they can be found rarely in almost any tissue, including bone tissue.

Adults are very small (2-7 mm) and have a gravid proglottid with a sac-shaped uterus. The larval form is also called hydatid cyst and can reach large sizes.

The hydatid cyst is a vesicle filled with crystalline fluid, whose interior membrane (germinative) reproduces asexually, forming thousands of protoscolices inside, and by processes of endogestation or exogestation, depending on the species, identical vesicles inside (daughter vesicles) or externally infiltrate the surrounding tissue or form metastases in other organs, which in turn can form new protoscolices, while in other species they are quite septate. , what

The ability of the larva and protoscolices to form new, identical larvae is exclusive to this genus.

The most important species is *Echinococcus granulosus* ("dog tapeworm") which is maintained in a dog-sheep cycle and causes most cases of human hydatidosis.

Another rare but important species as an etiologic agent of an emerging disease is *Echinococcus multilocularis* ("fox tapeworm"), which causes a lethal tumor form that generally compromises the liver (simulates liver cancer). ; It is the so-called echinococcus is alveolar.

The larval form is also called hydatid cyst and can reach large sizes.



Adultos (= hilos blanquecinos) en el  
intestino delgado de un perro

## 67. TAENIA SAGINATA (carne de Res)\_1:03:20

*Taenia saginata* is a parasitic flatworm of the class Cestoda, whose adult forms live in the first portions of the human small intestine, where they normally reach 4 to 12 m in length. It produces a disease called tapeworms, whose intermediate phase takes place in cattle, in which it produces an infection that is generally asymptomatic, located in the musculature of the animal.

Mode of transmission: the tapeworm is transmitted by contact of dirty hands with tapeworm eggs and by direct ingestion of food or water contaminated with tapeworm eggs.

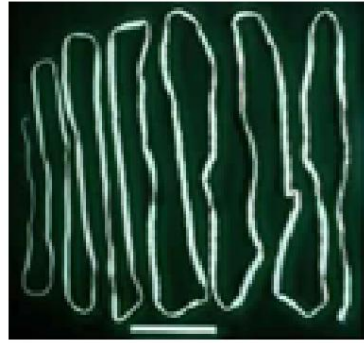
## 68. Taenia solium (pork)\_0:54:47

Parasite of the human small intestine. It measures 3 to 8 m. long.  
The scolex has four suction cups with two rows of hooks.  
Gravid proglottids contain up to 60,000 eggs and fall with the feces in strings.

The

Symptoms: allergy to ascorbic acid and pork, weight loss, anemia, intestinal disorders, constipation (can block the entire intestinal tract), viral diseases, epilepsy, migraines. vitamin B12 before being absorbed by the mucosa, fibromyalgia and intolerance to lactic acid.

In adults it sometimes steals up to 75% of the



It feeds on carbohydrates and amino acids.



## 69. ENDOLIMAH NANA\_

1:00:20

**Endolimax nana** is an exclusive commensal parasite of the human intestine, that is, it lives at the expense of man, but does not cause him harm. Although it does not cause diseases in man, however, its pathogenicity is a controversial issue, since clinical cases of chronic diarrhea or urticaria enterocolitis associated with its presence are periodically reported.

**Endolimax nana**, as the species name would seem to suggest, is a dwarf amoeba, rarely measuring more than 10  $\mu\text{m}$ .

Human infections are due to ingestion of viable cysts; infection by this amoeba indicates contamination of food and drink or poor personal hygiene.

## 70. LEISMANIA\_

1:06:12

**Leishmania** is a genus of protistas responsible for the disease such as leishmaniasis. The main infection vector are mosquitoes of the genera *Phlebotomus* (in Eurasia and Africa) and *Lutzomyia* (in America).

Its victims are vertebrates: leishmaniasis affects sea supials, rodent canids and primates.

More than 90 species of *Leishmania*-transmitting sandflies are known.

The disease occurs in three main forms:

- In leishmaniasis cutaneous, the parasite is located in the skin.

After the mosquito bite, it takes between one and twelve weeks for an erythematous papule to develop, which grows and ulcerates, generating a crust of dried exudate. Most patients develop one or two of these lesions on the face, hands, or legs, and 3 centimeters in diameter, although there is great variability in their presentation. The lesions tend to heal after with a size of each lesion between 0.5 spontaneously within , leaving hypopigmented scars with borders This type of leishmaniasis is

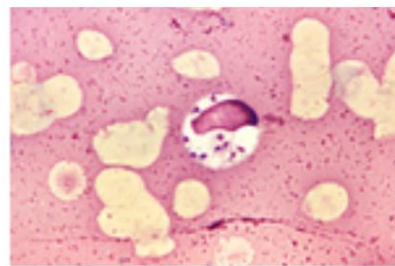
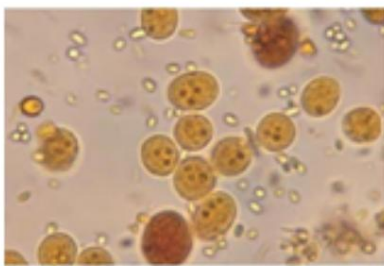
months

Raised hyperpigmentation more common in Central and South America.

Cutaneous leishmaniae is subdivided according to its duration into an acute form if it lasts less than one year in zoonoses or less than two years if it is anthroponotic

- Leishmaniasis visceral is characterized by inflammation of the liver and spleen, accompanied by severe abdominal distension, loss of body condition, malnutrition and anemia.

- Leishmaniasis mucocutaneous: it leads to partial or complete destruction of the mucous membranes of the nose, mouth and throat.



## 71.MALARIA / MALARIA\_1:00:43

Malaria (from medieval Italian «bad air») or paludismo (from paludis, genitive of the Latin term palus: swamp or swamp and from -ismo, in this case pathological action or process) is a disease produced by parasites of the genus Plasmodium, and some scientific studies suggest that it could have been transmitted to humans through western gorillas

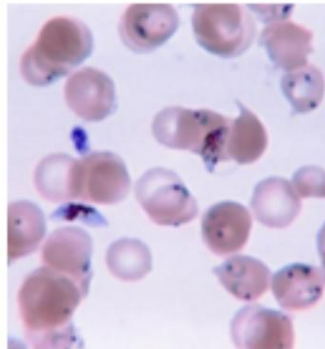
The disease can be caused by one or several of the different species of Plasmodium:

- Plasmodium falciparum
- Plasmodium vivax
- Plasmodium malariae
- Plasmodium ovale
- Plasmodium knowlesi

The first 3 are those reported in the American continent. The vectors of this disease are various species of the *Anopheles* genus mosquito.

As is known, only the females of this mosquito are the ones that feed on blood in order to mature the eggs; the males do not bite and cannot transmit diseases, since they only feed on nectars and vegetable juices.

The only possible form of direct contagion between humans is that a pregnant person transmits it through the placenta to the fetus, transmission by blood transfusions from donors who have suffered from the disease is also possible. or, by direct transmission through the bite of a mosquito.



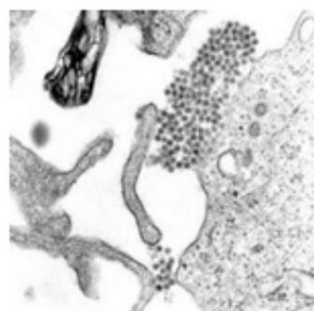
72. DöNGÜ\_  
1:00:00

Dengue is an infectious disease caused by the dengue virus, of the flavivirus genus that is transmitted by mosquitoes mainly by the *Aedes aegypti* (yellow fever mosquito).

The infection causes flu-like symptoms, and sometimes evolves into a life-threatening condition, called severe dengue or dengue hemorrhagic fever.

There are four types of dengue virus (DEN 1, DEN 2, DEN 3 and DEN 4).

Dengue occurs in tropical and subtropical climates all over the planet, especially in urban and semi-urban areas.





## **DOLORES (73-78)**

**Pain is a sensation that is perceived by the senses and processed by the nervous system, similar to the way humans perceive heat, cold, or touch. Acute pain is an alarm sign, an indication from the body that at that moment something is not working correctly or that something is happening outside the limits of normality.**

**Of course, if the pain continues for a long time, it can, however, lose its warning character and become a chronic pathological symptom. It can even take the character of an independent entity and, in this case, we speak of chronic pain.**

**In the case of acute pain, the cause is usually easily identifiable and can be treated specifically. The time limit from which one can go from speaking of acute pain to chronic pain is six months. Pain does not always have a physical cause. Sometimes pain pictures appear in the course of psychological disorders (such as depression), linked to psychological factors and that do not have any organic cause that justifies it. And, on the other hand, conversely, persistent pain can lead to depression.**

### **73. CARPAL TUNNEL\_ 1:06:40**

**The carpal tunnel is a narrow passageway at the base of the hand that contains tendons, ligaments, bones, and the median nerve.**

**It is delimited, in its proximal part by the bones: pisiform, semilunar, pyramidal and scaphoid and its distal part by: the trapezoid, trapezoid, the great and the hooked. The roof of the tunnel is delimited by the ligament called the flexor retinaculum. Through this tunnel run four tendons of the superficial common flexor muscle of the fingers (passing those corresponding to the 3rd and 4th fingers above, and the rest below), four tendons of the common flexor muscle depth of the fingers of the hand (which pass juxtaposed), and the tendon of the flexor pollicis longus.**

**In summary: The area in the wrist where the nerve enters the hand is called the carpal tunnel. This is normally narrow.**

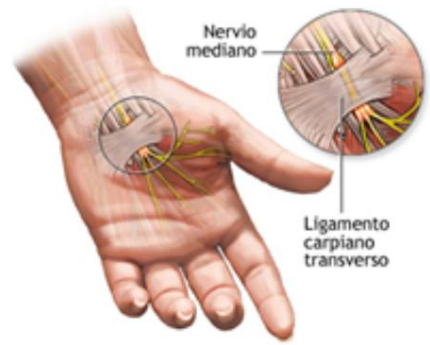
**Any inflammation can pinch the nerve and cause pain, numbness, tingling, or weakness. This is called carpal tunnel syndrome.**

**In carpal tunnel syndrome, the tendons swell and the median nerve becomes restricted, narrowing the tunnel.**



A migraine headache involves severe pain that usually occurs with other symptoms such as vision changes, sensitivity to noise or light, or nausea. The median nerve provides sensation and movement to the side of the hand in which it

is located. Scratch the thumb. This includes the palm of the hand, the thumb, the index finger, the middle finger, and the ring finger side of the thumb side.



Some people with this problem were born with a small carpal tunnel.

Carpal tunnel syndrome can also be caused by making the same hand and wrist movement over and over again.

The use of vibrating hand tools can also lead to this syndrome.

## 74. HEADACHE\_ 0:57:20

It is a pain or discomfort in the head, scalp or neck.

Serious causes of headaches are rare. Most people with headaches can feel much better by making lifestyle changes, learning ways to relax.

**Types:**

The most common type of headache is tension headache. It is caused by muscle tension in the shoulders, neck, scalp, and jaw.

**A tension headache:**

- Depression, anxiety, head trauma, or holding the head and neck in an abnormal position may be related to stress.
- Tends to occur on both sides of the head. It often starts at the back of the head and spreads forward. The pain may be dull or pressing, like a tight band or a press. You may feel pain and stiffness in your shoulders, neck, and jaw.

A migraine headache involves severe pain that usually occurs with other symptoms such as changes in vision, sensitivity to noise or light, or nausea.

**With a migraine:**

- The pain can be stabbing, throbbing or throbbing. It tends to start on one side of the head and can spread to both sides - The headache may be associated with an 'aura'. This is

a group of warning symptoms that start before the headache. The pain usually gets worse as you try to move from one place to another.

- Migraines can be triggered by foods such as chocolate, certain cheeses or monosodium glutamate (MSG). Caffeine withdrawal, lack of sleep, and alcohol can also trigger them.

Rebound headaches, headaches that keep coming back, can occur from overuse of pain relievers. People who take pain relievers more than 3 days a week on a regular basis can develop this type of pain. upside down

Other types of headache:

- Headache in clusters: It is a sharp and extremely painful headache that occurs up to several times a day for months and then disappears for weeks or months. In some people the headaches do not appear again.

The headache lasts less than an hour and tends to occur at the same times every day - Sinus headache: Causes pain in the front of the head and face. This type of headache is caused by inflammation in the sinus passages behind the cheeks, nose, and eyes.

The pain is worse when you lean forward and when you wake up in the morning.

- Headaches can occur if you have a cold, flu, fever or PMS.

- Headache due to a disorder called temporal arteritis. It is the inflammation and swelling of an artery that irrigates part of the area of the head, temples and neck.

## 75.Tooth PAIN\_ 0:57:21

Despite their hard, solid exterior, teeth really are delicate Causes of tooth pain can vary, including infection, fractured teeth, ill-fitting dental filling, excessive sensitivity, decay, tooth grinding or abscess. a crown or the

There are several reasons why a tooth hurts:

- Put dental replacement or for a cracked tooth.
- Pulpitis (inflammation of the dental pulp).
- An abscess (infection around the root of the tooth).
- Ill-fitting crowns or dental fillings or dental restorations can cause pain or sensitivity of the teeth

- **Teeth grinding, angina (heart pain), and also a sinus infection.**

**It is common to feel some pain after receiving dental treatment, such as a root canal or extraction; However, extreme pain after an extraction can be a sign that the blood clot has dislodged prematurely, which is a condition known as alveolitis.**

**What does tooth pain mean:**

- **A generally painful tooth can be a sign of a variety of conditions Pain in a tooth can be caused by a decayed or fractured tooth, or it indicates an infection in or around the tooth.**

- **Sensitivity to heat is indicative of a crack in the tooth or dental restoration, such as a broken crown or filling. The effect of having bacteria present inside the tooth is the production of gas.**

**Once the bacteria emit this gas inside the tooth, there is no way for the gas to escape; pressure inside the tooth builds up and spreads to the nerve tissues inside the tooth, causing pain.**

- **Sensitivity to cold, liquids, or candy is often a sign of exposed dentin. The dentin is the secondary layer of the tooth that has an osmotic property that allows the movement of fluids in and out of the tooth. These liquids can irritate the nerves within the pulp of the teeth.**

- **Throbbing pain is the effect of increased blood flow to the tooth and is caused by an inflamed tooth.**

- **Pain in each tooth or multiple teeth is recognized as general tooth pain. One reason all of your teeth hurt is from chronic teeth grinding. Gingival (gum) recession can cause pain as the roots of the teeth are exposed.**

**Likewise, severe gingivitis or periodontitis causes inflammation and pain. In addition, the putrefaction or erosion of dental enamel can cause pain. People who suffer from reflux, an eating disorder, or prolonged use of tooth whitening products can demineralize their tooth enamel.**

- **Wisdom tooth pain is common in patients with embedded wisdom teeth ie teeth that have not erupted. Pain in erupted wisdom teeth may be a sign of tooth decay or infection.**

## 76.NECK PAIN\_ 1:00:03

The neck is formed by a complex structure of cervical vertebrae, nerves, and muscles that protect the esophagus and larynx. As it is curved in shape, it supports the head (which weighs between 3 and 5 kg) and is very vulnerable to tension, pain and stiffness.

Cervical pain is a discomfort in any of the neck structures, including muscles, nerves, bones (vertebrae), intervertebral discs

articulations and

When your neck hurts, you may have a hard time moving it, especially turning it to the side. Many people describe this as having a stiff neck.

If your neck pain involves nerve compression, you may feel numbness, tingling, or weakness in your arm or hand. with

A common cause of neck pain is muscle tension or strain. Often, daily activities are responsible:

- Bending over a desk for hours - Having a bad posture while watching television or reading.
- Placing the computer monitor too high or too low.
- Sleeping in an uncomfortable position.
- Twisting and twisting the neck sharply while exercising.
- Lifting things too fast or with bad posture.

Falls or accidents can cause cervical injuries such as fractures of the vertebrae, whiplash, serious injuries, blood vessel injuries, and even paralysis.

Other causes include: conditions such as fibromyalgia, cervical arthritis or spondylosis, ruptured disc, small fractures of the spine due to osteoporosis, spinal stenosis (narrowing of the spinal canal), sprains, infection of the spine (osteomyelitis, abscess), torticollis cancer involving the spine.

## 77.BACK PAIN\_ 1.00.51

Back pain is very common, but in many cases it is not clear what exactly causes it. Depending on its cause, it is usually classified into 2 types: mechanical back pain and inflammatory back pain.

There are other less frequent causes that can also be associated with back pain, such as infections, kidney or digestive diseases, polymyalgia rheumatica and, exceptionally, tumors

The vertebral column has four main regions:

### 1. The cervical spine (neck)

The neck supports the weight of the head and protects the nerves that run from the brain to the rest of the body. This section of the spine has seven vertebral bodies (bones). Most of the rotation of the cervical spine comes from the upper two segments while most of the flexion/extension movement comes from C5-C6 and C6-C7 (each movement segment is named after the two bodies). see tebrals that are connected).

Acute neck pain is usually caused by straining a muscle, ligament, or tendon (such as from applying sudden force or straining to the neck), and will usually heal with time and treatment. non-surgical neck pain relief (such as ice and/or heat, chiropractic or theopathic manipulation medications, etc.)

### 2. The spinal cord (upper back)

The 12 vertebral bodies in the upper back form the thoracic column. The firm attachment of the ribcage at each level of the spine offers stability and structural support to the upper and lower back while allowing very little movement. The thoracic column is basically a strong box designed to protect the vital organs of the heart and lungs.

### 3. The lumbar spine (lower back)

The lower back has much more mobility than the thoracic column and also supports the weight of the torso. As a consequence, it is the part of the spine that is most frequently ionized.

Movement in the lumbar spine is divided among three segments with a disproportionate amount of movement occurring in the lower segments (L3-L4 and L4-L5).

Consequently, these two segments are the ones that are most likely to be injured by wear (for example: osteoarthritis). The two lowest discs (L4-L5 and L5-S1) are the ones that must be stressed the most and are more likely to herniate.

This can cause low back pain and possibly numbness that radiates down the leg and down to the foot (sciatica).

The vast majority of low back pain episodes are caused by muscle strain. Although a muscle strain does not sound like a serious injury, trauma to the muscles and other soft tissues (ligaments, tendons) in the lower back can cause severe back pain. The good news is that soft tissues have a good blood supply that brings nutrients to the injured area, facilitates the healing process, and often offers effective relief from back pain.

#### 4. The sacral region (lower vertebral column)

Beneath the lumbar spine there is a bone called the sacrum, which forms the posterior part of the pelvis. This bone is shaped like a triangle that fits between the two halves of the pelvis, connecting the vertebral column with the lower back. my lower body tad.

The sacrum is connected to part of the pelvis (the iliac bones) by the sacroiliac joints. Pain in the sacrum is often called sacroiliac joint dysfunction, and it is more common in women than in men. men The coccyx is in the sacral region, in the lowest part of the vertebral column. Pain in the tailbone is called coccydynia, and it occurs more often in women than men.

## 7.KNEE PAIN\_ 1:00:10

It is a common symptom in people of all ages. It can start suddenly, often after an injury or exercise. Knee pain can also start out as a mild ache and then gradually get worse.

Excessive use of the knee can lead to knee problems that cause pain, overload, lack of form during physical activity, not warming up or not stretching enough.

Knee pain can be caused by:

- Anterior knee pain.
- Arthritis : including rheumatoid arthritis, os theoar tritisy gout.
- Baker's cyst: a fluid-filled swelling located behind the knee that can occur with swelling (inflammation) from other causes such as arthritis - Bursitis: inflammation from repetitive pressure on the knee knee, such as kneeling for prolonged periods, overload or injury.
- After connective tissue lathes, such as lupus.
- Di s location of the patella.

- **Iliotibial band syndrome** (a hip disorder related to an injury to the thick band that runs from the hip to the outside of the knee).
- **Joint infection.**
- **Knee injuries:** an injury to the anterior cruciate ligament or an injury to the medial lateral ligament can cause bleeding into the knee, which worsens the pain.
- **Osgood-Schlatter disease.**
- **Tendinitis:** a pain in the front of the knee that gets worse when going up and down stairs or inclines - **Cartilage tear** (a tear of the menisci ): pain that is felt on the inside or outside of the knee joint.
- **Ligament rupture (ACL tear):** leads to knee pain and instability.
- **Muscle strain or sprains:** minor ligament injuries caused by sudden or unnatural sprains - **Overweight**

**Less common conditions that can lead to knee pain include bone tumors**

## **MUSHROOMS (79-84)**

**Fungi are a group of living beings different from plants and animals, which is why they are classified in a separate kingdom called Fungi. The science that studies them is called Mycology.**

**They have a great capacity for adaptation and can develop on any medium or surface, both in forests and in cities. They are produced by means of spores, which are disseminated mainly by wind and water.**

**They play a decomposing role, since they transform organic matter into simpler substances that can be assimilated by other living beings. But they can also develop by forming mutually beneficial associations with plant roots (mycorrhizae) and with algae, giving rise to lichens, which are organisms totally different from plants and fungi themselves, while some grow on other living beings causing illness or even death.**

**Fungi have played and still play a very important role in medicine, industry and food. The era of antibiotics begins with the discovery of penicillin, obtained from the fungus *Penicillium Notatum*; Likewise, some fungi are important for the cheese, beer, wine and other industries; in addition to the excellent source of vitamins, proteins, fiber and minerals that edible mushrooms make up**

**Although the exact number of species is not known, up to now approximately 80,000 have been described worldwide.**

**Fungi in humans produce fungal infections, they can live on the skin, mucous membranes and other parts of the body.**

**If we refer to those that inhabit the skin, these organisms can live in the dead tissues of hair, nails or the outer layers of it.**

**Approximately half of all types of fungi are harmful, but they can be difficult to destroy, especially if the patient has a weak immune system.**

**Among the factors that influence the appearance of fungi present on the skin are the moisture retained in clothing and footwear made of synthetic materials and contact with various surfaces, such as sand, since the acid mantle and fat are eliminated from the skin, which prevents the action of these pathogenic microorganisms.**



The signs that show that the patient has a fungal skin infection are divided into:

- **Dermatophytosis of the body:** Also called body tinea. This symptom causes circular or oval scaly patches with raised, slightly reddened edges, itching, and an inflamed area that may ooze.
- **Dermatophytosis of the scalp:** Also called tinea of the scalp. It results in hair loss in one or more areas, blackheads on the scalp, scaly and itchy areas, and hair that breaks near the area of birth.
- **Athlete's foot:** Causes cracking and pain located between the toes, itching and raw skin, discoloration and weakening of the nails and the sole of the foot may be affected.

## 79. Aspergillosis\_ 0:58:52

**Aspergillus** is caused by a fungus (*Aspergillus*) that commonly grows on dead leaves, stored grain, manure or compost piles, or other decaying vegetation.

It can also be found in marijuana leaves. Although the most frequent is *Aspergillus fumigatus*, there are other potential pathogens, such as *Aspergillus flavus*, *Aspergillus niger*, *Aspergillus nidulans* or *Aspergillus terreus*

Although most people are frequently exposed to aspergillus, infections caused by the fungus rarely occur in people with a normal immune system.

There are several forms of aspergillus is:

- **Pulmonary Aspergillosis** is of the allergic bronchopulmonary type: It is an allergic reaction to the fungus that generally develops in people who already had lung problems, fibrosis cystic. like asthma or
- **Aspergilloma:** it is a tumor (fungal ball) that develops in an area of previous lung disease or lung scarring, such as a tubercle or a lung abscess.
- **Invasive type pulmonary Aspergillosis:** It is a serious infection with pneumonia that can spread to other parts of the body.  
The infection occurs almost exclusively in people with weakened immune systems due to cancer, AIDS, leukemia, organ transplantation, chemotherapy, or other conditions or medications that reduce the number of normal white blood cells or weaken the immune system. immune system.

## 80.CANDIDIASIS\_

1:00:00

Candida is (Candidos is monilias is ) is an infection caused by several varieties of Candida ('fungi'), especially Candida albicans. Infection of mucous membranes, such as in the mouth or vagina, is common among individuals with a normal immune system. However, these conditions are more frequent or persistent in people with diabetes or AIDS and in pregnant women

They are part of the group of the most frequent diseases that affect man and it can even be affirmed that practically all people throughout their lives will suffer from it at some point.

Most Candida species are saprophytic and can be part of the skin flora, with the exception of Candida albicans, which when found on the skin is the etiological agent of primary candidiasis. There are multiple predisposing factors to candidiasis infection: some depend on the host and others on environmental conditions

Among the first are the physiological, the genetic and the acquired.

Thus, newborns, women in their period, patients with premenstrual diabetes, lymphoma, leukemia, who take antibiotics or corticosteroids or immunosuppressants or have debilitating diseases have a greater facility for suffering from this dermatosis

It proliferates with environmental factors humidity, heat, chronic maceration, for example, of the corners in the elderly, friction between two skin surfaces favor infestation. ill-fitting dentures

yeast infections:

- Oral thrush or candida is a fungal infection that causes white patches in the mouth. It affects the lingual or labial mucosa, among which are frequent the angular ones, called perforations.
- Candida esophagitis is thrush that spreads into the esophagus, the tube that carries food from the mouth to the stomach. Causes pain or difficulty swallowing.
- Genital candidiasis: in men candidiasis balanitis and vaginal candidiasis (vaginitis) in women.
- Candida skin infections cause itching and rashes - Candida in the blood can be life threatening.

## 81. MYCOSIS/TINEA\_ 0:56:44

Mycosis is the disease caused by fungi (fungal or fungal diseases). Mycosis basically consists of different or different diseases caused by microscopic fungi, which tend to multiply on the surface of the skin (superficial mycosis), or do so in the organs themselves.

They are also known by the names of fungal infections or fungal infections, and are characterized by being frequent and contagious diseases.

Some of the mycoses are opportunistic conditions that thrive in the face of a drop in the defenses of the affected subject's immune system.

Such loss can be caused by stress, psychic states of anxiety or depression, by the HIV-AIDS retrovirus or by certain chemotherapeutic treatments. A typical example of opportunistic mycosis is candidiasis, the most common of them.

Superficial mycoses are highly prevalent infections, particularly in the tropics.

The main ones are the tinea isotrichophyton (capitis, corporis, cruris, barbae and pedis, that is, of the head, body, leg, beard and foot, respectively), produced by Trichophyton, Epidermophyton and Microsporum, superficial candidiasis (Candida albicans, tropicalis), pityriasis versicolor (Malassezia furfur) and onychomycosis.

In human beings, we can find some fungi that normally live in our body. Some are present in our mouths, on the skin, in the intestines or in the vagina of women, and in most cases they are actually harmless. However, when they multiply in a considerable way is when they do become a problem, giving rise to alterations. At this moment is when we find ourselves before a mycosis.

Among the most common mycoses are the cutaneous mycoses.

which are those that appear on the skin as a consequence of the multiplication of the different fungi that are normally found on it. They are usually benign infections.

### Symptoms of mycosis

It is evident that, depending on the place or area of the body where the fungal infection occurs, its symptoms will be different since the signs that appear in the face of a fungal infection in the vagina will not be the same, one that arises on the skin.

## **82.ATHLETE'S FOOT\_**

**0:57:19**

**It is a foot infection caused by fungus or yeast. The medical term is tinea podis.**

**It especially affects the spaces between the toes and is very common among adolescent athletes and marine workers. Redness and blisters appear in the folds, which later end up transforming into fissures.**

**Athlete's foot occurs when a certain fungus or yeast grows on the skin of your feet. In addition to the toes, it can also occur on the heels, on the palms, and between the fingers.**

**Athlete's foot is the most common type of ringworm infection. The fungus or yeast thrives in warm and humid areas**

**The risk of contracting this condition increases if you:**

- Wear closed footwear, especially if it is covered with plastic.**
- Keeps your feet wet for long periods.**
- He sweats a lot.**
- Has a minor injury to the nails or skin.**

**Athlete's foot is contagious and can be spread by direct contact or by contact with items such as shoes, socks, and pool or shower surfaces.**

## **83.AFLATOXINA\_**

**1:00:00**

**Aflatoxins are a type of toxins produced by certain fungi in agricultural crops such as corn, peanuts, cottonseed, and tree nuts (hard-shelled such as walnuts).**

**Aflatoxins are mainly produced by Aspergillus Flavus and Aspergillus Parasiticus which are abundant in warm and humid areas of the planet.**

**Aflatoxin-producing fungi can contaminate crops in the fields, during harvest, or during storage.**

**People can be exposed to aflatoxins when they eat contaminated plant products or when they eat meat or dairy products from animals that ate contaminated food.**

**Farmers and other agricultural workers may be inhaling dust generated during handling and exposed processing of contaminated crops and food**

**Exposure to aflatoxins is associated with an increased risk of liver cancer.**

## **84.MALASSEZIA FURFUR\_ 0:58:33**

**Malassezia Furfur is a kind of fungus, which is normal flora on people's skin and is the cause of dandruff and an infectious and non-contagious skin disease called**

**Pityriasis Versicolor (tinea): it is a superficial mycosis whose name is due to its color changes and affects more men between 15 and 30 years of age who live in hot and humid countries**

**This fungus is the most frequent in the summer season and the most visible, since the tan accentuates the affected white or pink parts**

**It exists in two morphological forms: a yeast stage that was once called Pityrosporum ovale (seborrheic dermatitis) and a mycelial phase that is the pathogenic form.**

**It is located in seborrheic areas of the skin such as: scalp, retroauricular regions, wings of the nose, and upper area of the sternal manubrium.**

**Malassezia Furfur has been associated with other conditions such as: folliculitis, blepharitis, peritonitis and fungemia in children who have been infected intravenously.**

**The scales of the fungus are transmitted from person to person, directly or indirectly, through fomites.**

**Among the factors that can predispose to suffering from this istamic disease are: the use of corticosteroids, genetic predisposition, defects in the production of lymphokines, excessive sweating, malnutrition, high humidity and temperature, little hygiene, immunosuppressive therapy and the use of oils or other lipids on the skin.**

## DETOX / LINFAS (85-91 )

Lymph is a transparent liquid that runs through the lymphatic vessels and is generally devoid of pigments.

It is produced after the excess of liquid that leaves the blood capillaries to the interstitial or intercellular space, being collected by the lymphatic capillaries that drain into larger lymphatic vessels until converging in ducts that empty into the subclavian veins. The lymph travels through the lymphatic system thanks to weak contractions of the muscles of the pulsation of the nearby arteries and the movement of the extremities. If a vessel suffers an obstruction, the liquid accumulates in the affected area, producing a swelling called edema.

This fluid is made up of a clear liquid low in protein and rich in lipids, similar to blood, but with the difference that the only cells it contains are white blood cells, which migrate from the capillaries and come from the lymph nodes without containing red blood cells

It may also contain microorganisms that, passing through the filter of the lymph nodes are eliminated. Lymph is less abundant than blood: it is considered that there are approximately 2 liters of lymph, while the volume of blood is about 5 liters.

The lymph performs several functions:

- Collect and return the interstitial fluid to the blood.
- Defend the body against pathogenic organisms.
- Absorb nutrients from the digestive system and dump them into the subclavian veins.

Its composition is similar to that of blood plasma and contains substances such as: plasmatic proteins, long-chain fatty acids (absorbed from the intestinal contents), fibrinogen, blood cells, cancer cells, germs and cell debris and metabolic

Leukocytes lymphocytes like macrophages, cellular elements responsible for defense and reaction against microorganisms and that are added to the lymph from the lymph nodes. These are also lymph filtration stations.

**85.DETOX DR. BECK\_**  
**0:30:00**

The electrical therapy process that emits microcurrent directly into the blood through electrodes, makes bacteria, microbes, germs, pathogens, parasites, fungi or viruses unable to adhere to cells, unable to reproduce and end up dying.

They are neutralized in the blood and finally expelled by the body through the kidneys naturally, thus leaving the body free of disease.

The forerunner of that method was Dr. Bob Beck. First he discovered that there was no need to draw the patient's blood in order to electrify it. It is enough to use the electrodes with low frequencies

Currently every patient can use this extraordinary method at home. Dr. Beck's blood electrification always accompanied it with two is of colloidal silver: a natural antibiotic that acts in areas where the current does not reach, as in the case of "empty" organs (for example, the intestines). In addition, colloidal silver prevents the risk of reinfection and multiplies the effects of therapy.

## 86.ZAPPER DRA. CLARK\_ 0:16:40

According to Dr. Clark, the cause of most degenerative diseases would be the presence of parasites and chemical contaminants in the sick human body at the same time.

The healthy human being can normally harbor various types of bacteria, viruses, fungi and other species of parasites in his body, but he keeps them under control in the intestine, from where they can only go outside when contained in the intestines. feces Things change when the body is contaminated with chemicals and/or heavy metals.

The action of the different parasites, in addition to contributing to the development of numerous diseases, can turn into malignant a tumor that is originally benign.

His basic protocol consists of the electrical elimination of microorganisms through the Zapper, a device of his invention; of 4 cures with plants for parasites, liver, kidneys and intestines, and of 4 sanitation, dental, diet, body and home programs.

Clark starts from a conclusion already admitted by all the human body emits electrical waves like a radio station, hence different types of measurements can be made from electrocardiograms to electroacupuncture measurements. Everything emits a bandwidth of frequency bands In general, the most primitive organisms have a lower bandwidth compared to the higher frequencies and the wider width of higher animals. Working along this line, he found that frequencies between 1,520 KHz and 9,460 KHz resonated with the human body, and were audible in an audio oscillator.

After more experiments, new discoveries came: "any positive frequency kills all bacteria, viruses and parasites when simultaneously given sufficient voltage (5 to 10 volts), duration (7 minutes) in 3 sessions with 20-30 minutes of separation between both and the frequency (from 10 to 500,000 Hz)".

A positive voltage applied to any part of the body attracts negatively charged things such as bacteria, thus the Zapper was born.

Certainly there are recommendations such as applying the treatment to pregnant women or people with pacemakers, or taking into account that with electrocution therapy it is not possible to eliminate only harmful bacteria. It is therefore recommended to carry out support to repopulate the intestinal flora (kefir, homemade yogurt...).

## 87.WHITE BLOOD CELLS\_

### 1:00:50

From Latin globulus, globule is a small spherical body. It is often used to name the cells that make up the blood.

It can be distinguished in white blood cells and red blood cells.

White blood cells or leukocytes are the blood cells that are responsible for carrying out the immune response, acting in the body's defense against antigens and foreign substances. Leukocytes, along with red blood cells and platelets, the set of elements form blood.

The origin of the white blood cells is found in the bone marrow and in the lymphatic tissue. Lacking pigments, they are referred to as "white" to differentiate them from red blood cells.

A leukocyte is a mobile cell between 8 and 20 micrometers that moves through pseudopods. my tochondria and other cellular organelles, and it can leave the blood vessels thanks to a mechanism known as diapedes that allows it to prolong its cytoplasmic content. Presents nucleus,

Depending on the shape of the nucleus, white blood cells can be divided into lymphocytes, monocytes, neutrophils, basophils, or eosinophils.

It is possible to register alterations in the size, shape and functioning of white blood cells. These disorders are caused by hereditary diseases, reactions against a medication or anemia, for example. Leukocytes is the increase in the amount of white blood cells while the decrease is called leukopenia. infections

Leukocytes is when the number of white blood cells is greater than 11,000 per cubic millimeter. This disorder may be due to an excessive growth of the population of neutrophils (which should occupy between 54% and 62% of the total leukocytes), lymphocytes (whose normal percentage is between 25% and 33%) or monocytes (which cannot exceed 7%).



The abnormal growth of the absolute value of white blood cells can take place for a large number of reasons, including the following: as

acute abdominal infections (serious condition characterized by symptoms in the abdominal area, related to a disease of the intra-abdominal organs), bowel obstructions, liver disorders, fatigue due to excessive exercise (which can cause a sudden and sustained secretion of adrenaline), stress (which can also cause leukopenia), pregnancy (in which case lymphocytes decrease), digestive problems .

## 88.BLOOD CIRCULATION\_0:50:00

The purpose of blood circulation is to carry oxygen and nutrients to all the cells of the organism. It is activated by the heart, which works like a pump.

Oxygenated blood circulates through the arteries, which become smaller and smaller until they become capillaries. The blood then goes to the organs where oxygen and molecular nutrients are captured by the cells. The blood takes carbon dioxide and waste from the cells. This waste will be eliminated in the liver and kidneys. Then, the blood passes into the veins and continues to the lungs where it is again charged with oxygen. Then return to the heart for another complete turn.

The causes or risk factors that lead to inadequate blood flow are very similar to the factors that trigger atherosclerosis (hardening of the arteries). We highlight the following 5: Bad habits: smoking, alcohol consumption, a diet based on foods rich in saturated fats and sedentary lifestyle. High cholesterol level and high blood pressure.

Obesity or high overweight. Es t rés Hereditary factors such as a family history of atherosclerosis is

Poor blood circulation affects our feet and legs long before the first visible signs appear. Excessive tiredness, pain in the extremities or punctures may be the first symptoms. But there are other signs that can be they observe as imple vista: spider veins varicose veins and very swollen legs sensation of tingling and cramps changes in temperature, very dry, hard and stiff skin.

## **89.SYSTEM LYMPHATIC\_1:25:00**

The lymphatic system is a complex system made up of a series of organs and a network of lymphatic vessels. Each organ that constitutes said system has well-defined and differentiated functions.

The lymphatic vessels are in charge of carrying the lymph that originates at the level of the tissues towards the venous system and reincorporates it into the blood circulation. These vessels are present in practically the entire organism (except the central nervous system, bone marrow and cartilage). They have the shape of a glove finger and communicate with each other by forming a network of small vessels called lymphatic capillaries.

Lymph is a slightly yellowish liquid formed in its greatest proportion (90%) by water. Likewise, it is made up of proteins, which from the bloodstream have passed into the tissues, fats, remains of dead cells of bacteria, malignant cells (in the case of cancer) and cells present in the blood as lymphocytes. Lymph is purified and filtered by lymph nodes also called lymph nodes before returning to the general circulation.

From the blood capillaries a certain amount of liquid leaves the tissues, which under normal conditions (90%) is reabsorbed, for the most part, by the capillaries themselves.

The rest (10%) is eliminated through the lymphatic vessels. In the whole organism, 1 to 2 liters of lymph are formed.

The lymphatic system has a great capacity for adaptation, so that in situations in which there is a greater flow of fluid from the capillaries to the tissues, it is capable of absorbing excess lymph, avoiding its accumulation.

Along the route of the lymphatic vessels, there are thickenings that correspond to the lymph nodes or lymph nodes, a fundamental part of the lymphatic system since they have important functions in the defense of the organism (immunity). These ganglia with you have a

Lymphatic ganglia or nodules are located throughout the entire organism, being especially abundant in the neck, armpits and groin.

They have a variable shape (rounded, elongated or bean-shaped) and a size that ranges between 0.5 and 1cm. Its size can increase due to infectious or tumor processes

**Other lymphatic organs are: The bone marrow, the tonsils, the thymus, the spleen.**

**The functions of the lymphatic system are: • Collects the lymph that forms in the tissues and transports it to the bloodstream. • The lymphatic system plays an important role in the defense of the organism. • Exerts the action of a biological filter.**

## **90.IMMUNE STIMULUS\_**

**0:57:00**

**Humoral immunity is the main defense mechanism against extracellular microorganisms and their toxins in which the components of the immune system that attack antigens are not cells directly but are macromolecules such as antibodies or proteins of the complement system.**

**They constantly defend their biological integrity against aggressions, coming from outside as well as from the organism itself. Otherwise, they would die as a consequence of tumors and infections of virus bacteria, fungi, etc. For these defense phenomena to take place, the organisms have a set of special elements, known as the immune system.**

**Defense capacity is acquired before birth and matures and consolidates in the first years of life outside the womb.**

**The non-specific immune response is the body's first defensive barrier and does not require prior sensitization. This type of response is mediated by cells with phagocytic capacity and natural killer cells.**

**The specific or acquired response develops only against the substance that induced its initiation and the lymphocytes and soluble elements released by the same antibodies and lymphokines participate primarily**

**All substances that behave as foreign to an organism against which it develops a specific immune response are known as antigens.**

**Generally, the immune system responds in a unitary way, so the division into non-specific and specific response is more theoretical than real. What does happen is that, depending on the circumstances, in some cases one or the other of these forms of response predominates.**

The individual is constantly receiving infections from pathogenic elements that, if the immune system did not exist, would invade the entire organism with the consequent death of the individual.

The immune system is also protecting the individual against the formation and growth of neoplastic cells.

However, there are many cases in which defense systems are themselves the cause of disease. This is, for example, what happens when the individual reacts even against substances that are innocuous in principle, etc.

like plant pollen

Then we talk about hypersensitivity reactions. In others the system cases, for reasons not yet well known

immune reacts against its own components, which it destroys, causing serious disorders or even death. These are autoimmune diseases, which can affect any component of the body.

Also, sometimes the cells in charge of the immune defense proliferate uncontrollably, producing lymphoproliferative syndromes, among which the most frequent are leukemias.

## 91.IMMUNE STABILIZATION\_0:50.01

Maintaining a strong immune system is the best defense.

For people who are in a very delicate situation of the immune system and for the smooth restoration of the same if it is not stable.

It stimulates the defense cells of our body: lymphocytes (B and T), macrophages, dendritic cells and leukocytes

## CHRONIC / MISCELLANEOUS (92-127)

### 92. ANTI CONVULSION\_ 1:00:00

People who have seizures or nonepileptic seizures (NES) have periods of seizure-like activity. NES are characterized by a loss or change in physical functioning without a central nervous system problem. The loss or change causes periods of physical activity or inactivity that resembles epileptic seizures. They are usually related to a mental health problem, such as emotional conflict or stress. However, sometimes they are related to a problem such as low blood sugar or heart function.

Treatment varies for each person. The goals of treatment are to relieve stress or emotional conflict that may be causing the loss or change in physical functioning. Physical causes, such as low blood sugar or a heart problem, are treated as needed.

### 93. ARTHRITIS\_ 0:59:32

It is the inflammation of one or more joints. A joint is the area where 2 bones meet. There are more than 100 different kinds of arthritis.

Arthritis involves the breakdown of cartilage. Normal cartilage protects a joint and allows it to move smoothly. Cartilage also absorbs shock when pressure is placed on the joint, such as when you walk. Without the usual amount of cartilage, the bones rub against each other.

This causes pain, swelling (inflammation), and stiffness.

Inflammation and damage to the joint can be the result of:

- An autoimmune disease (the body's immune system mistakenly attacks healthy tissue)

- Bone fracture -

General "wear and tear" of the joints - Infection, often by bacteria or

viruses - Crises such as uric acid or pyrophosphate

calcium dihydrate.



In most cases joint swelling goes away after the cause is gone or treated. Some don't. When this happens, you have arthritis.

times

prolonged (chronic).

Arthritis can occur in men or women. Osteoarthritis is the most common type.

The

Other more common types of inflammatory arthritis include:

- Ankylosing spondylitis
- Arthritis due to crystals, gout or disease due to depositions of calcium pyrophosphates
- Juvenile rheumatoid arthritis (in children)
- Bacterial infections
- Psoriatic arthritis
- Arthritis reactiva
- Rheumatoid arthritis (in adults)
- Scleroderma
- Systemic lupus erythematosus (SLE)

## 94. RHEUMA\_

1:07:45

Rheumatism, or rheumatic disorder, is a nonspecific term for medical problems that affect the joints, heart, bones, kidneys, skin, and lungs.

The study of therapeutic

interventions in these disorders is called rheumatology.

The term rheumatism, although still used colloquially and in historical contexts, is no longer frequently used in medical or technical literature; is an obsolete term. In fact, then, it would be more appropriate to say that there is no longer any recognized disorder called simply rheumatism.

The traditional term covers a range of different problems so attributing the symptoms to "rheumatism" doesn't say much.

However, sources related to rheumatism tend to focus on arthritis, although the so-called "soft tissue rheumatism" regional pain syndrome, can cause great discomfort and difficulty, classifying as a rheumatological disease.

On the other hand, arthritis and rheumatism together are associated with at least 200 different

disorders or diseases

The

major rheumatic disorders currently recognized include:

Ankylosing spondylitis, back pain, bursitis /Tendinitis (shoulder, wrist, biceps, thigh, knee and hip pain), capsulitis neck pain, psoriatic arthritis, rheumatic fever, rheumatoid arthritis, lupus erythematosus, giant cell arteritis and Rheumatic polymyalgia, tenosynovitis

, itis month

disorders being common in terms of , they probably have little in Despite these their epidemiology, they do share two characteristics: they cause chronic (although often intermittent) pain, and they are difficult to treat. They are also, collectively, very common

## 95.LUPUS ERYTHEMATOSUS\_1:01.00

Systemic lupus erythematosus (SLE) is an autoimmune disease, meaning that the body's immune system mistakenly attacks healthy tissue. This can affect your skin

the joints the kidneys the brain and other organs.

The cause of autoimmune diseases is not fully known.

SLE is much more common in women than in men. It can occur at any age. However, it appears more frequently in people between the ages of 15 and 44. Black and Asian people are affected more frequently than other races.

It can also be caused by certain drugs

Symptoms vary from person to person and may come and go, called "flare-ups." The most widespread symptoms are: swelling and joint pain, fever with no known cause, red rashes on the skin, usually on the face and in the shape of a butterfly, chest pain when breathing deeply, hair loss, Pale or purple fingers or toes, sensitivity to the sun. . .

## 96.FATIGUE CHRONICLE (SFC)\_1:05:40

Chronic fatigue syndrome is a disorder that causes extreme fatigue. This fatigue is not the kind of tiredness that goes away after rest. On the contrary, it persists for a long time and limits your ability to do daily tasks

The cause is not known. It is most common in women between the ages of 40 and 60, but anyone can get it. It can last for years There is no cure for chronic fatigue, so the goal of treatment is to improve symptoms The syndrome affects people differently.

It may be due to: - Epstein-

Barr virus or human herpes virus type 6 (HHV-6). However, no specific virus has been identified as the cause.

- Inflammation in the nervous system, due to a defective response in the immune system.
- Other causes that may influence are: age, previous illness, stress, genetics, environmental factors

The main symptom is extreme tiredness: lasts at least 6 days, not relieved by bed rest, so intense that months it prevents participation in certain activities. It gets worse when you are in an upright position or after physical or mental exercise.

Other symptoms include: - Feeling

very tired for more than 24 hours after exercising that would normally be considered easy.

- Not feeling rested after having slept long enough.
- Your memory fault.
- Trouble concentrating.
- Confusion ion.
- Ar t icular pain but s in swelling or redness.
- Headaches different from those you have had in the past.
- Irritabilidad.
- Mild fever: 101°F (38.3°C) or less - Muscle aches (myalgias).
- Muscle weakness in the whole body or in different parts that is not caused by any known disorder.
- Sore throat.
- Tenderness in the lymph nodes in the neck or armpit.

## 97.FIBROMYALGIA\_

### 1:31:10

The word fibromyalgia (FM) means pain in the muscles and fibrous tissue (ligaments and tendons). Fibromyalgia is characterized by generalized musculoskeletal pain and painful pressure sensation at specific points.

This

pain resembles that originating in the joints, but it is not a joint disease.

We can say that fibromyalgia consists of an anomaly in the perception of pain, so that stimuli are perceived as painful that usually are not. In addition to pain, fibromyalgia can cause generalized stiffness, especially when getting up in the morning, and a sensation of poorly defined swelling in the hands and feet.

They may also notice

poorly defined tingling that affects diffusely, especially the hands.



The person who seeks the doctor's help usually says "everything hurts", but other times it is referred to as burning, discomfort or discomfort. Pain often varies depending on time of day, activity level, weather changes, lack of sleep, or stress

In addition to pain, fibromyalgia causes many other symptoms: 90% of patients have tiredness, 70-80% sleep disorders and up to 25% anxiety or depression.

Symptoms are also very frequent, such as poor tolerance to exertion, a sensation of generalized stiffness (especially when getting up in the morning), a sensation of poorly defined inflammation in the hands and feet, tingling that affects the hands diffusely, headaches, menstrual pain, irritable colon, dry mouth and eyes.

The cause of this disturbance is not known, but many factors are thought to be involved. There are people who develop the disease without an apparent cause and in others it begins after identifiable processes such as a bacterial or viral infection, a car accident or in other cases it appears after another known disease limits the quality of life (rheumatoid arthritis, lupus erythematosus, etc.). These triggering agents do not seem to cause the disease, but rather what they probably do is awaken it in a person who already has a hidden abnormality in the regulation of their ability to respond to certain stimuli

## 98.PSORIASIS\_

0:53:20

Psoria is an inflammatory skin disease, which occasionally also affects the joints, causing redness, scaling, pain, and swelling. It can manifest itself with different intensity throughout life and it is not contagious.

Psorias begins in the immune system, specifically in T lymphocytes. These cells are activated improperly and cause different cellular responses, the proliferation and dilation of blood vessels. as

In the rest of the people, the cellular turnover of the epidermis occurs for 30 days. However, in psoriatic patients it lasts four days. This fact causes them to accumulate on the surface, causing thick, scaly and reddish skin plaques that cause itching or pain.

Although the specific origin of the disease is unknown, it is known that it is a genetic disease. In fact, the gene whose alteration influences the appearance of the pathology has been located.

It is also known to be a hereditary disease. If one of the two parents is psoriatic, one in eight children can suffer from it; If both parents are affected, the probability rises to one in four. However, not because of being psoriatic, the children will be. In addition, it may happen that the genetic alteration is inherited, but the disease does not develop, because exogenous (external) factors are also involved in its appearance.

Among the exogenous factors that can trigger it, the following stand out:

- Chronic infections - Nervous stress.
- Obesity.
- Alcohol consumption.
- Diseases such as rheumatoid arthritis.
- Hormonal changes - Traumatism (wounds, blows, sunburn, etc.).

Psoriasis can manifest itself slowly or appear suddenly. In addition, the symptoms may disappear for a period of time and reappear.

The most common manifestations are skin lesions in the form of plaques whose size can vary and which are characterized by being red and covered by whitish scales of different shapes and sizes, some may be the size of the nail on the little finger, but Others can spread to cover large areas of the body, taking on a ring or spiral shape.

The most common locations are the scalp, elbows, back, and buttocks. the knees he

The desquamation can be confused with severe dandruff, but the characteristic plaques of psoriasis, which mix scaly areas with other completely normal ones, distinguish it from dandruff. Psoriasis can also appear around and under the nails, which thicken and become deformed. The eyebrows, armpits, navel, and groins may also be affected.

## 99. SCLEROSIS MULTIPLE\_1:20.24

Multiple Sclerosis is a chronic disease of the Central Nervous System. It is present worldwide and is one of the most common neurological diseases among the population between 20 and 30 years of age. It can cause symptoms such as fatigue, lack of balance, pain, visual alterations, and cognitive difficulties. speech, tremor, etc. The course of MS cannot be predicted, it is a capricious disease that can vary greatly from one person to another.

It is not contagious, nor hereditary, nor fatal. It affects people at the beginning of their working life, when they are starting their life projects, and it occurs more frequently (more than double) in women than in men

Multiple Sclerosis (MS), also known as demyelinating myelopathy, is a disease of the Central Nervous System (CNS) in which two main parts are differentiated: brain and spinal cord. Wrapping and protecting the nerve fibers of the CNS is a material made up of proteins and fats called myelin that facilitates the conduction of electrical impulses between the nerve fibers.

In MS, myelin is lost in multiple areas, sometimes leaving scars (sclerosis). These ionated areas are also known as demyelinating plaques.

Myelin not only protects nerve fibers but also facilitates their function. If myelin is destroyed or damaged, the ability of the nerves to conduct electrical impulses to and from the brain is interrupted, leading to symptoms. Fortunately, myelin damage is reversible. ible on many occasions

MS types:

- Relapsing-remitting form (RRMS)
- Secondary Progressive Form (EMSP)
- Primary progressive form (EMPP)
- Progressive relapsing form (PRME)

It is not known exactly what causes MS. The most common belief is that a virus, a genetic defect, or both are to blame. Environmental factors can also play a role.

100.ELA / LOU GERIG\_  
1:03:42

Amyotrophic lateral sclerosis (ALS for short) is a neuromuscular degenerative disease.

It originates when the cells of the nervous system called motor neurons gradually decrease their functioning and die, causing a progressive muscular paralysis with a fatal prognosis: in its advanced stages, patients suffer a total paralysis that is accompanied by exaltation. Tation of tendon reflexes (result of loss of inhibitory muscle controls).

The term "lateral sclerosis" refers to the affectation of the nerve fibers in the lateral part of the spinal cord, as well as gliosis (proliferation of astrocytes, a type of glial cell) that occurs and that of "amyotrophic" to the muscular atrophy that occurs when the muscles stop receiving nerve signals

The consequence is a progressive muscular weakness that progresses towards the patient's total paralysis, also affecting the ability to speak, chew, swallow and breathe. On the other hand, functions such as sensitivity and intelligence are not affected, nor are eye movements, since these are motoneurons that have more resistance.

ALS is also known by other names:

- "Lou Gehrig's disease" (1903-1941; American baseball player) in the United States - "Charcot's disease" in France.
- MNE (motor neuron disease).
- Motor neuron disease (popularly singular, despite the fact that it affects half a million motor neurons that connect the brain with the muscles).

It is a disease as frequent as multiple sclerosis and more than muscular dystrophia.

In the popular sphere, it is known especially for being the one suffered by the physicist Stephen Hawking, who is the most famous patient with this disease.

## 101.HYPERTHYROIDISM\_ 1:00.00

It is a condition in which the thyroid gland produces too much thyroid hormone. The condition is often called an overactive thyroid.

The thyroid gland is an important organ of the endocrine system. It is located in the front of the neck, just below where the collarbones meet. The gland produces the hormones that control how each cell in the body uses energy. This process is called metabolism.

Common symptoms include:

- Difficult to focus.
- Fat each.
- Frequent bowel movements -
- Goiter (visibly enlarged thyroid) or thyroid nodules - Hair loss.
- Tremor in the hands -
- Intolerance to heat.
- Increased appetite.
- Increased sweating.

- Irregularities in men t ruation in women.
- We are nervous too.
- Very strong heart beats or very fast heart rate (palpitations).
- Concern.
- Sleep problems.
- Weight loss or gain, in some cases).

Other symptoms that can occur with this disease are: development of breasts in men, sticky skin, diarrhea, high blood pressure, itching or irritation in the eyes, itchy skin, nausea and vomiting , bulging eyes (exophthalmos ), hot or red skin, weakness of hips and shoulders

## 102.HYPOTHYROIDISM\_ 1:28:56

It is a condition in which the thyroid gland does not produce enough thyroid hormone. This condition is often called underactive thyroid.

The most common cause of hypothyroidism is thyroiditis. Swelling and inflammation damage the cells of the thyroid gland

Causes of this problem include:

- The immuni tary sis theme attacks the t yroid gland - Viral infections (common res cold) u ot ras respiratory infections .
- Pregnancy (often called postpartum thyroiditis).
- Certain medicines such as lithium or amiodarone.
- Congenital abnormalities (at birth).
- Radiation therapies to the neck or brain to treat different cancers - Radioactive iodine used to treat an overactive thyroid.
- Surgical removal of part or all of the thyroid gland.
- Sheehan's syndrome, a condition that can occur in a woman who bleeds profusely during pregnancy or childbirth and causes destruction of the pituitary gland.
- Pituitary tumor or surgery of the pituitary gland pi tui tory.

The symptoms may vary from person to person. These may include: fatigue, weight gain, puffiness of the face, cold intolerance, joint and muscle pain, constipation, dry skin, fine, dry hair, decreased sweating, menstrual periods. abundant or irregular pulses and fertility problems, depression, decreased heart rate.

## 103.PANCREATITIS\_

0:52.47

The pancreas is a large gland located behind the stomach and near the first part of the small intestine that secretes digestive juices into the small intestine through a tube called the pancreatic duct. The pancreas also releases the hormones insulin and glucagon into the blood.

Pancreatitis is an inflammation of the pancreas. This occurs when digestive enzymes begin to digest the pancreas. Pancreatitis can be acute or chronic. Either way, it is serious and can cause complications.

Acute pancreatitis occurs suddenly and usually clears up within a few days with treatment. It is often caused by gallstones. Common symptoms are severe pain in the upper abdomen, nausea, and vomiting. Other causes:

- Alcohol consumption is responsible for up to 70% of the cases. About 5 to 8 drinks per day for 5 years or more can damage the pancreas.
- Gallstones are the next most common cause. When gallstones travel out of the gallbladder into the bile ducts, they block the opening that drains bile and enzymes. Bile and enzymes "build up" in the pancreas and cause swelling.
- Genetics may be a factor in some cases cause is unknown. en ot ras the

Chronic pancreatitis is not cured. It gets worse over time and deals permanent damage. The most common cause is excessive alcohol consumption. Other causes are:

- Cystic fibroids and other inherited diseases, large amounts of calcium or fat in the blood, some medicines and autoimmune diseases - Autoimmune problems (when the immune system attacks the body)
- Damage to the ducts or pancreas during surgery - High levels of a fat called triglycerides; frequently above 1,000 mg/dL - Injury to the pancreas from an accident - After certain procedures used to diagnose gallbladder or pancreas problems (ERCP) or an ultrasound-guided biopsy sound.
- Is chyst ical fibros - Hyperactive parathyroid gland - Reye syndrome - Use of certain medications (especially steroids, corticosteroids, sulfamides, diuretics, thiazides and azothioprine).
- Certain viral infections that affect the pancreas.

## 104. HEPATITIS\_ 1:27.16

Hepatitis is an inflammation of the liver. The condition may remit on its own or progress to fibrosis (scarring), cirrhosis, or liver cancer.

Hepatitis viruses are the most common cause of hepatitis, which can also be caused by other infections, toxic substances (for example, alcohol or certain drugs), or autoimmune diseases.

Hepatitis A and E are usually caused by ingestion of contaminated food or water

Hepatitis B, C and D are usually produced by contact with infected bodily fluids. Transfusion of contaminated blood or blood products, invasive medical procedures in which contaminated equipment is used and, in the case of hepatitis B, transmission from mother to baby at delivery or from family member to child, as well as sexual contact.

Acute infection may be accompanied by few or no symptoms; It can also produce manifestations such as jaundice (yellowing of the skin and eyes), dark urine, intense fatigue, nausea.

vomiting cough and abdominal pain.

Hepatitis can start and get better quickly. It can also come back if a prolonged illness. In some cases it can lead to liver damage, liver failure, or even liver cancer.

## 105. WARTS\_ 1:00:05

Warts are small lesions that appear on the skin of our body, they can appear on the face, hands, feet, anus, genitals, armpits.

The appearance of the wart is caused by the human papillomavirus, and they have different subtypes with different shapes and sizes if they appear in a visible area of the body such as the face and hands many of them are ancient thetic

This virus spreads very easily through the lesions we have on our skin, such as: cuts, scratches, cracks, and the development of warts is related to a deficiency in our immune system.

Each body reacts to HPV infection differently, which means that not everyone who is infected with the HPV virus develops warts.

The weaker the immune system, the higher the risk of actually having warts is human papillomavirus estimated at up to 80%. In the population that is infected by the at some point in their lives, only 5% will develop warts.

Warts tend to appear more frequently on the hands, feet, elbows and face, however, any region of the body can be affected. The wart can be single or multiple, and present various aspects, which vary in size, color and format, it is classified into 8 different types which

son:

1. Common wart: This type of wart has a hard core of skin, it looks more like a lump with a rough surface, it is very similar to a cauliflower, but also some grow irregularly, flat and prominent, They can grow to the size of a pea. These appear around the hands, knees and face.

2. Foot wart: Plantar warts are those that appear on the sole of the foot, like the common wart, they are shaped like a cauliflower, they are soft, they can be brown and gray with a dark center, they are very painful and they must be treated as quickly as possible. They are usually larger than v. common and flatter, this is due to the pressure exerted by the body on the foot.

3. Water wart: The cause of this type of wart is the mollusca virus. You will realize if you are infected, by the appearance of blisters with a dense whitish liquid, highly contagious. The area on the body where they appear are the hands and feet, but in some cases on the face.

4. Flat wart: As the name indicates, they are flat, and are a few millimeters in size, they are brown/flesh in color. They usually appear on the hands and face.

5. Smooth wart: This type of warts, like the flat ones, usually appear on the hands and face, they are smooth, flat and slightly raised.

6. Filiform wart: They are characterized by being small and elongated, and are considered to be of the benign type, they can manifest irregularly and grouped, single and multiple. In general, they manifest on the face, eyelids, nose, lips, neck, which makes eliminating them a challenge.

7. Genital warts: They appear around the anus and the genitals, their shape is similar to that of a cauliflower, they usually appear in adults through sexual contact.

8. Mosaic wart: They are called that, because they are generally small grouped warts, they are very difficult to remove, since they resist treatments, so you have to apply the treatment a couple more times than usual.



## 106. ULCER\_ 0:53:30

**An ulcer or sore is any open lesion of the skin or mucous membrane with loss of substance. Ulcers can have a very varied origin and location. The most frequent are:**

**Peptic ulcer:** affects the mucosa of the stomach (gastric ulcer) or duodenum (duodenal ulcer). Ulcers of the esophagus also sometimes occur in patients affected by Barrett's esophagus. Most ulcers occur in the first layer of the inner lining. The hole that goes completely through the stomach or duodenum is called perforation and is an emergency.

**It is really uncomfortable for many people**

**Cutaneous ulcer:** lesion of the skin that implies loss of the epidermis, part of the dermis and even the hypodermis; It can be a merely superficial wound or a deeper affectation. They affect the skin and can become very deep.

**Several types are distinguished according to their origin: due to friction, pressure or mixed. There are different origins and in many cases they tend to have a chronic evolution.**

**Pressure ulcers:** lesions of ischemic origin located on the skin and/or underlying tissue. They constitute a special type of lesions caused by poor blood supply and tissue nutrition, produced by the combined action of extrinsic factors, among which pressure, friction and shear forces stand out, being determinant the pressure time relationship.

**PU's are a preventable problem in 95% of cases and constitute the most preventable and treatable complication that any patient with reduced mobility can present. They occur mainly in bedridden patients, either due to obesity, with ventilatory support, bone rigidity, etc.**

**Genital ulcer:** located in the genital region, on many occasions they are caused by sexually transmitted diseases, such as syphilis, chancroid and lymphogranuloma venereum.

**Corneal ulcer:** this type of ulcer takes place in the cornea. It can be a consequence of infections, keratitis or rheumatism on the eye and sometimes cause sequelae consisting of vision deficit. One of the most frequent corneal ulcers is that produced by the herpes simplex virus, called a dendritic ulcer because of its branched shape.

**Oral ulcers:** they are open lesions caused by different factors: Gingivitis, Herpes simplex, prolonged intubation, mouth cancer, oral Candidiasis. . .

**The symptoms are oral pain, visible lesions in the mouth and loss of appetite.**

## 107. UTERINE POLYPS\_

0:57:42

A uterine polyp is a tumor in the uterus, which is the most common benign pathology in women with abnormal uterine bleeding or infertility.

Although numerous molecular mechanisms have been proposed to explain the development of endometrial polyps (hormonal, genetic, etc.), the specific cause that produces them is not well known. However, there are a number of factors that can increase the risk of developing uterine polyps:

- Estrogens: high levels of these female sex hormones in the blood increase the risk of developing endometrial polyps. Estrogens are mainly produced by the ovaries and, to a lesser extent, by the adrenal glands.

During pregnancy, the placenta also has the ability to synthesize them.

- Tamoxifen: is a drug with proven efficacy used in the treatment of breast cancer. Between 2-36% of postmenopausal women treated with this drug may develop uterine polyps.

- Hormonal treatments in postmenopausal women

- Age: the older, the greater the risk.

- Obesity and arterial hypertension: although some authors consider that they are risk factors for developing uterine polyps, the latest studies seem to conclude that, in isolation, they cannot be considered risk factors for the appearance of polyps. the same

- Some not very common diseases such as the syndrome of Lynch syndrome or Cowden syndrome are associated with an increased risk of developing endometrial polyps.

Endometrial polyps can be asymptomatic; in fact, they are often discovered by chance during routine examinations performed on women, such as pelvic examination, pelvic ultrasound, or hysteroscopy.

When uterine polyps produce symptoms, the most frequent manifestations are: their

- Abnormal uterine bleeding: this process, frequently described by patients as vaginal bleeding, is the most common symptom and occurs in 64-88% of women with polyps.

- Uterine bleeding can manifest itself in different ways: - Menorrhagia: excessively heavy menstrual periods - Metrorrhagia: bleeding not related to menstruation.

Generally the volume of bleeding is usually not very large. It is the most common symptom in premenopausal women with endometrial polyps, and it is also a very common form of presentation in postmenopausal women - Vaginal bleeding after sexual intercourse - All those women who present abnormal uterine bleeding require peer evaluation  
See your doctor to rule out serious diseases such as endometrial cancer.

As a consequence of the frequent bleeding, the appearance of anemia is common. In all asymptomatic women who present anemia in the analysis, uterine bleeding must be ruled out as a possible cause of this.

- Infertility: large polyps or multiple polyps reduce the probability of pregnancy (alter sperm transport and the embryo implantation process); in fact, its diagnosis is not uncommon in women who undergo medical tests for infertility.

- Pain: when the polyps are large, they can prolapse and appear through the opening of the cervix, occupying part of the vagina, and causing pain due to cervical dilation. In these cases the bleeding can be more intense. In addition, they can lead to alterations in the sexual life of women.

- recurrent miscarriages

The severity of the symptoms depends on the size, location, and number of polyps present.

## 108. MALIGNANT TUMORS\_

0:53:21

**Malignant tumors are cancerous** Cancer cells can invade and damage tissues and organs near the tumor. Cancer cells can break away from the malignant tumor and enter the lymphatic system or bloodstream, which is the way cancer reaches other parts of the body.

The characteristic aspect of cancer is the ability of the cell to grow rapidly, uncontrollably and independently of the tissue where it began. The spread of cancer to other sites or organs in the body through the blood flow or lymphatic system is called metastases. Malignant tumors can generally be classified into six categories:

- **Carcinomas** These cancers originate in the epithelium, which is the lining of the cells of an organ. Carcinomas are the most common type of cancer. Common sites for carcinomas are the skin, mouth, lung, sinuses, stomach, colon, and uterus.
- **Sarcomas** Sarcomas are cancers of connective and supportive (soft tissue) tissue of all types. Sarcomas are found anywhere in the body and frequently form secondary growths in the lungs.
- **Gliomas** These are cancers of the brain or spinal cord caused by neoplasms in glial cells.
- **Leukemias** are blood cancers. They affect the myelocytic lineage (ie, they affect granulocytes, monocytes and/or mastocytes); beginning in those same cell groups or in some common progenitor.
- **Lymphomas** These are cancers that arise in the lymphocytic line (that is, affecting lymphocytes) or in a common progenitor; or that affect other cell lines such as antigen presenting cells (APCs), various types of macrophages, or some common progenitor.
- **Immature teratoma.** They occur in girls and young women, usually under the age of 18. These cancerous tumors are rare and resemble embryonic or fetal tissues such as connective tissue, the respiratory tract, and the brain.

## 109. SARCOMA\_

1:00:00

Sarcomas are a group of cancers that originate in cells of connective tissue, also known as connective or supporting tissue. This tissue forms the structure of the human body and its organs and can adopt different qualities depending on the type of cells that form it: fat, muscle, blood vessels, cartilage, tendons and bones.

ent re ot ros

Sarcomas are mainly divided into bone sarcomas, the most common being osteosarcoma, and soft tissue sarcomas.

As explained by the Spanish Society of Medical Oncology (SEOM), soft tissue sarcomas (SPB) are malignant tumors that are located in the soft tissue, that is, they exclude bone and cartilage, and include fatty tissue, muscle, blood vessels, nerves and deep tissue tendons

of the skin.

These rare tumors can manifest in any part of the body. However, they are more common on the legs and arms. They can also appear on the trunk, head, posterior part of the abdominal cavity, and internal organs.

Although there are more than 50 subtypes of sarcomas, they are grouped as SPB because many have common characteristics

As in other types of cancer, such as osteosarcoma or brain tumors, the causes of soft tissue sarcomas are unknown.

In addition, most of the cases that have been diagnosed are not associated with any known risk factor. Even so, in some tumors there are predominant risk factors:

- Presence of rare hereditary diseases: especially neurofibromatosis and Von Recklinghausen's disease, which are linked to some types of sarcomas
- Patients who have received radiotherapy years ago have a higher risk of developing sarcomas. In these cases, the cancer is highly resistant to treatment.

## 110. TREMBLE OF HANDS\_

### 1:13:55

It is a type of stirring movement. It is most noticeable in the hands and arms but can affect any part of the body, including the head or vocal cords.

Tremors can occur at any age. They are more common in older people. Everyone has a tremor when they move their hands. Fatigue, stress, anger, fear, caffeine, and smoking can make this type of tremor worse.

A tremor that does not go away with time may be a sign of a health problem and should be discussed with your doctor.

Essential tremor is the most common. Shaking almost always involves quick, small movements. It usually occurs when you are trying to do something, like reaching for an object or writing. This type of tremor can also be hereditary.

Tremor can be caused by: certain medications disorders of the brain, nerves, or movement, including uncontrollable muscle movements (dystonia), brain tumor, alcohol use or alcohol withdrawal, multiple sclerosis, tiredness or muscle weakness, normal aging, hyperthyroidism, Parkinson's disease, stress, anxiety or fatigue, stroke, high doses of coffee or other caffeinated beverages.

## 111. HEMORRHOIDS\_

0:24:20

Hemorrhoids are very common. They are the result of increased pressure in the anus. This can occur during pregnancy, childbirth, or due to constipation. The pressure causes the veins and anal tissues to swell. This tissue can bleed, often during bowel movements.

Hemorrhoids can be caused by: straining during bowel movements constipation. sitting for prolonged periods of time, especially in the bathroom or certain diseases such as liver cirrhosis.

Hemorrhoids can be inside or outside the body: - Internal hemorrhoids occur just inside the anus, where the rectum begins. When they are big they can come out (prolapse). The most common problem with internal hemorrhoids is bleeding during bowel movements - External hemorrhoids appear outside the anus. They can make it difficult to clean the area after a bowel movement. If a blood clot forms in an external hemorrhoid, it can be very painful (thrombosed external hemorrhoid).

Hemorrhoids are often not painful, but if a blood clot forms, they can be very painful.

## 112. OBESITY\_

0:55:49

Obesity means having excess body fat. It is different from being overweight, which means weighing too much. Fat and/or weight can be a result of muscle mass, bone, and water in the body. Both terms person's weight is greater than what is considered healthy based on their height. mean that a

Obesity occurs over time, when you eat more calories than you consume. The balance between caloric intake and calories lost is different for each person. Factors that can affect your weight include genetic makeup, overeating, eating high-fat foods, and lack of physical activity.

Being obese increases the risk of diabetes, heart disease, stroke, arthritis, and certain cancers. If you are obese, losing at least 5 to 10 percent of your weight can delay or prevent some of these diseases.

## 113. FLATULENCE\_ 0:58:10

They refer to the air in the intestine that comes out through the rectum, also called flatus or flatulence. Gas is normally formed in the intestines as your body digests food. It can create a feeling of being bloated and can cause colic or cramping in the belly.

Gas can be caused by certain foods if you: - Eat hard-to-digest foods    Can have like fiber.

For some, adding more fiber to the diet can cause temporary gas.  
times

The body can adjust and stop producing them over time.

- Eat or drink something that the body cannot tolerate; for example, dairy, gluten, nuts - Other common causes of gas are: ...  
antibiotics irritable bowel syndrome, inability to absorb nutrients properly (malabsorption), inability to digest nutrients properly (poor digestion), swallowing of air when eating.

## 114. ANGINA PECTOR\_ 0:59.36

Angina is pain or discomfort in the chest that is felt when there is not enough blood supply to the heart muscle. This heart muscle needs the oxygen that the blood carries. Angina can feel like a pressure or crushing pain in the chest. It may look like indigestion. There may also be pain in the shoulders, neck, jaw, or back.

the arms

Angina is a symptom of coronary artery disease, the most common heart disease. This occurs when a substance called plaque builds up in the arteries that supply blood to the heart, reducing blood flow.

There are three types of angina:

- Stable angina is the most common. It occurs when the heart works harder than usual. Stable angina has a regular pattern.
- Unstable angina is the most dangerous. It does not follow a pattern and can occur without making any physical effort. It does not go away on its own with rest or medicine. It is a sign that it could lead to a heart attack.
- Variable angina is the least common. It happens when you are resting.

## 115. LIVER STIMULUS\_ 1:59:52

A tired and overloaded liver generates a wide variety of physical symptoms. such as: difficulties to assimilate food loss of appetite, headaches, bloating, gas accumulation, vertigo. . . nausea

Liver malfunction has a direct impact on the immune and hormonal systems.

Poor nutrition, elevated parasites lead to large amounts of inconvenient substances reaching the liver and generating a chronic toxic collapse, which has repercussions in many areas and is generally not taken into account when addressing a specific health problem. health.

This is the case of gallstones, which are generated inside the liver (intrahepatic stones).

These calculations greatly compromise the efficiency of the liver and above all the correct flow of bile s

## 116. RENAL STIMULUS\_ 0:53:06

It stimulates renal function when it is affected and weak, allowing urination when there is blockage. It is usually combined with diuretic products

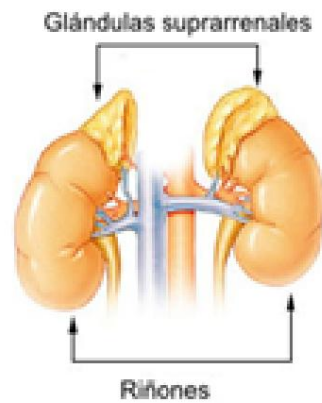
## 117. ADRENAL GLAND\_0:56:40

The adrenal glands are two retroperitoneal structures, the right pyramidal in shape and the left semilunar in shape, both are located above the kidneys. Their function is to regulate responses to corticosteroid stress (mainly cor ti sol) and catecholamines (especially adrenaline). These produce essential hormones for through the s intes is of life, including sex hormones and cortisol (which helps respond to stress among other functions).

A disorder in them causes their glands to produce too much or not enough hormones. In Cushing's syndrome, for example, there is too much cortisol, while in Addison's disease, there is too little. Some people are born without the ability to produce enough corti sol.

Causes of adrenal gland disorders include: genetic mutations including pheochromocytosis infections a problem in another gland (such as the pituitary gland, which helps regulate the adrenal gland), certain medications





## 118.GALL BLADDER\_ 0:53:20

The gallbladder is a pear-shaped organ located under the liver. It stores bile, a fluid produced by the liver to digest fats. When the stomach and intestines digest food, the gallbladder releases bile through a tube called the common bile duct. That duct connects the gallbladder and liver to the small intestine.

The gallbladder causes problems if something blocks the flow of bile through the bile ducts. That often happens with gallstones, which form when there are substances in the bile that harden. They can produce: inflammation of the gallbladder, obstruction of the common bile duct, obstruction of the pancreatic duct, gallbladder cancer.

## 119. PROSTATITIS\_ 0:56:57

Prostatitis is swelling and inflammation of the prostate, a walnut-sized gland located just below the bladder in men. The prostate is a gland that produces a fluid (semen) that nourishes and transports sperm.

Prostatitis often causes painful or difficult urination, pain in the groin, pelvic area, or genitals, and sometimes flu-like symptoms.

Prostatitis affects men of all ages, but it tends to be more common in men age 50 and younger. This disease is due to several causes.

**Any bacteria that can cause a urinary infection can cause acute bacterial prostatitis.**

**Infections that are transmitted through sexual contact can cause prostatitis. These include chlamydia and gonorrhea, which are sexually transmitted infections (STIs).**

**They are more likely to occur as a result of:**

- Certain sexual practices, such as having anal intercourse without using a condom.**
- Having many sexual partners.**

**In men over the age of 35, E. coli and other common bacteria cause prostatitis in most cases. This type of prostatitis can begin in: - The epididymis, a small tube that is located above the testicles.**

- The urethra, the tube that carries urine from the bladder to the outside through the pen.**

**Also, acute prostatitis can be caused by problems with the urethra or prostate, such as: - A blockage that**

**reduces or prevents the flow of urine out of the bladder.**

- Inability to retract the foreskin (phimosis).**
- Injury in the area between the scrotum and the anus (perineum).**
- Bladder catheter, cystoscopy or prostate biopsy (removal of a piece of tissue to look for cancer).**

**Men age 50 and older who have an enlarged prostate are at increased risk of prostatitis. The prostate gland can become blocked. This facilitates the proliferation of bacteria. The symptoms of chronic prostatitis can be very similar to an enlarged prostate gland.**

## **120. ADDICTIONS\_**

**1:00:00**

**Addiction is considered a chronic and recurring disease of the brain that is characterized by a pathological search for reward and/or relief through the use of a substance or other behaviors.**

**This implies an inability to control behavior, difficulty in permanent abstinence, compelling desire to consume, decreased recognition of significant problems caused by one's own behavior and in interpersonal relationships, as well as a dysfunctional emotional response.**

The result is a decrease in the quality of life of the affected person (generating problems in their work, in their academic activities, in their social relationships and/or in their family or partner relationships). Neuroscience currently considers that addiction to substances and behaviors share the same neurobiological bases.

In addition to the consumption of psychoactive substances, there are addictions to processes such as addiction to sex, addiction to gambling (gambling), addiction to pornography, addiction to television, sports, addiction to new technologies (technophilia), to mobile (nomophobia) and Internet addiction.

## 121. ANOREXIA\_ 1:09:15

It is an eating disorder that causes people to lose more weight than is considered healthy for their age and height.

People with this disorder may have an intense fear of gaining weight, even when they are underweight. They may diet or exercise excessively or use other methods to lose weight.

The exact causes of anorexia are not known. Many factors are probably involved: genes and hormones can play a role.

Social attitudes that promote very thin body types can also contribute.

Normally it begins with the elimination of carbohydrates, since there is a false belief that they make you fat. It then rejects fats, proteins and even liquids, leading to cases of extreme dehydration. Other associated behaviors such as the use of diuretics, laxatives, purging, induced vomiting or excessive physical exercise can be added to these drastic measures.

Affected people can lose from 15 to 50 percent, in the most critical cases, of their body weight. This disease is usually associated with serious psychological changes that cause changes in behavior, emotional behavior and stigmatization of the body.

Anorexia often begins during adolescence, or early adulthood; It is more common in women, although it can also be seen in men.

Its cause is unknown, but social factors seem important. Although there are many sociocultural factors that can trigger anorexia, it is likely that a part of the population has a greater physical predisposition to suffer from this disorder, regardless of the pressure that the environment may exert. For this reason, there are general factors that are associated with a triggering factor or a certain biological vulnerability, which is what precipitates the development of the disease.

**Risk factors for anorexia include:**

- Being more concerned or paying more attention to weight and figure.
- Having an anxiety disorder in childhood.
- Having a negative self-image.
- Having eating problems during lactation or early childhood.
- Having certain cultural or social ideas regarding health and beauty.
- Trying to be a perfectionist or too focused on rules.
- The own obesity of the sick.
- Maternal obesity.
- Death or illness of a loved one.
- Separation from parents.
- Removal from home.
- School failures.
- Accidents.
- Events.

**Types of Anorexia:**

- Anorexia as a symptom can cause a lack of appetite that can occur in feverish states, general and digestive illnesses or simply in transitory situations of daily life.
- Anorexia nervosa, a specific disease characterized by self-induced weight loss accompanied by a distorted body image.
- Sexual anorexia or anaphrodisia, the loss of "appetite" for both romantic and sexual interaction.

## 122. INFERTILITY\_ 1:00:56

**Infertility is the inability of a person, animal or plant to reproduce by natural means.**

**There are two types of infertility:**

- **Primary infertility** refers to couples who have not been able to get pregnant after at least one year of sexual intercourse without using contraceptive methods.
- **Secondary infertility** refers to couples who have been able to get pregnant at least once, but now cannot.

It can be caused by many physical and emotional factors. It can be due to problems in the man, the woman, or both.

Female infertility can occur when: 1.

- A fertilized egg or embryo does not survive once it attaches to the lining of the womb (uterus).
- The fertilized egg does not attach to the lining of the uterus.
- The ovules cannot move from the ovary to the womb.
- The ovaries have problems producing eggs.

It can be caused by: -

Autoimmune disorders, such as antiphospholipid syndrome (APS).

- Congenital defects modifying the reproductive tract.
- Cancer or tumor.
- Coagulation disorders.
- **Diabetes.**
- Excessive alcohol consumption.
- **Excessive exercise.**
- Eating disorders or malnutrition.
- Neoplasms (such as fibroids or polyps) in the uterus and cervix.
- Use of certain medicines, such as chemotherapy drugs.
- Hormonal imbalances.
- Obesity.
- Advanced age.
- Ovarian cysts and polycystic ovarian syndrome (PCOS).
- Pelvic infection or pelvic inflammatory disease (PID).
- Scarring as a result of a sexually transmitted infection, previous abdominal surgery or endometriosis.
- Smoking.
- Surgery to prevent pregnancy (tubal ligation) or failed tubal recanalization surgery (reanastomosis).
- Thyroid disease.

2. Male infertility may be due to: - A decrease in the number of sperm.

- A blockage that prevents sperm from being released.
- Defects in spermatozoa.

It can be caused by: -

Congenital defects.

- Cancer treatments, including chemotherapy and radiation.
- Exposure to high heat for prolonged periods.
- Compulsive consumption of alcohol, marijuana or cocaine.
- Hormonal imbalance.
- Impotence.

- Infection.
- Consumption of certain medicines, such as cimetidine, spironolactone and nitrofurantoin.
- Obesity.
- Advanced age.
- Retrograde ejaculation.
- Scarring from sexually transmitted diseases, injury or surgery.
- Smoking.
- Toxins in the environment.
- Vasectomy or failed vasovasostomy.

A woman reaches her highest fertility between 20 and 25 years of age. The chances of a woman getting pregnant drop considerably after age 35 (and especially after age 40). The age at which fertility begins to decline varies from woman to woman.

Infertility problems and miscarriage rates increase dramatically after the age of 35. There are now options for egg collection and storage for women in their 20s and 30s.

## 123. MENOPAUSE\_

0:58:52

Menopause (from the Greek mens, meaning "monthly", and pausi, meaning "cessation") is defined as the permanent cessation of menstruation and has physiological correlates, with the decline in estrogen secretion due to loss of follicular function. .

The normal age of onset of menopause is between 45 and 55 years.

This last bleeding is preceded by the climacteric, which is the transition phase between the reproductive and non-reproductive stage of the woman. This process begins several years before the last period, when the cycle (or menstrual period) begins to become less regular.

Decreased levels of the hormones estrogen and progesterone cause changes in menstruation, which are important for maintaining a healthy vagina and uterus, as well as for normal menstrual cycles and a successful pregnancy.

Estrogen also helps maintain good bone health and helps women maintain a good blood cholesterol level. Some types of surgery or the use of birth control medications can also lead to menopause.

**For example, when the uterus must be removed (hysterectomy) or when both ovaries are removed (oophorectomy), the symptoms of menopause begin immediately, regardless of age.**

**As we have said, in general, menopause does not come suddenly. It is preceded by what is known as the premenopause or climacteric, a period of approximately four years during which the production of sex hormones gradually decreases.**

**Premenopause manifests itself mainly in the form of physiological problems that vary from one woman to another. However, a series of symptoms can be extracted that are among the most common:**

- Irregular rules.**
- Hot flashes, headaches, palpitations and sweating.**
- Dizziness and vertigo.**
- Swelling and pain in the breasts and/or abdomen**
- Insomnia and other sleep disturbances.**
- Pain during intercourse and vaginal dryness.**
- Emotional changes and transitory depressions.**
- Osteoporosis.**

**However, one of the most worrying symptoms is the changes in the figure, a consequence of a sudden tendency to gain weight. With the arrival of menopause, the ovaries begin to produce less female hormones.**

**This causes the accumulation of fat in the hips and thighs to decrease, while it increases in the abdomen. In addition, there is a significant increase in fluid retention.**

**Given these changes, it is important to pay attention to food: eat healthy and prepare a diet that is as balanced as possible.**

**On the other hand, it is essential to perform some physical activity on a regular basis, such as walking (at least 30 minutes a day, if possible), especially to reduce hot flashes, sleep in a well-ventilated room, reduce sources of stress and familiarize with relaxation techniques.**

## 124. LICHEN

0:41:40

Lichen, it can be said that it is a dermatosis with many 'faces':

When a patient is diagnosed with lichen, the first thing to warn him is that we are not dealing with a contagious disease.

The term Lichen refers to a living being that develops in multiple habitats and with a large number of forms.

Lichen planus (LP) is a rare chronic inflammatory disease, which according to statistics accounts for between 0.2 and 1% of dermatological consultations. It is usually seen on the skin but it can also affect the mucous membranes (oral or genital). Rarely, hair or nails are also involved.

The typical picture is that of a patient with lesions of a purplish-red tone, elevated, isolated or forming small groups, on the wrists and/or ankles. The itching is moderate and characteristically relieved by superficial scratching, just with the fingertips. It is progressive in appearance and can also affect the trunk and other extremities. In 50% of cases there is involvement of the mucous membranes: mouth, tongue and genitalia.

Wickham's striae identify this disease. They are fine whitish lines on the lesions, which give it a very characteristic shiny appearance.

When it affects the mouth, it manifests as a whitish lacy reticulum. As it does not usually bother, the finding may be accidental during a dental examination, since in 15% of the time it is the only location.

At the origin of the disease is the immunological attack of lymphocytes (cytotoxic T) towards the epidermis. A relationship with hepatitis C virus infection has been seen, especially in Mediterranean areas.

Microscopic analysis of a typical lichen biopsy shows a pattern called lichenoid in the dermis (lymphomonocyte band infiltrate), as well as some changes in the epidermis, which makes it easily identifiable under the microscope for the pathologist.



## Types of Lichen:

- **Lichen planus:** It is the main variant that has already been described.
- **Mucosal lichen:** It can go unnoticed or be very annoying if it occurs with erosions (erosive lichen). See also scleroatrophic lichen below.
- **Lichen pilaris:** The lichen affects the hair follicle causing its atrophy and loss. It's more common in women. It settles down after months with diffuse itching on the head that ends up leading to a smooth and shiny red surface, with skipped loss of hair. Fibrosing frontal alopecia with delayed implant line on the forehead and sideburns would in many cases be lichen pilaris.
- **Scleroatrophic lichen:** In this variant, what predominates is atrophy and loss of normal skin texture. When it affects the genital mucosa, this decrease in elasticity can produce fissures or erosions that end up compromising sexual activity.
- **Lichen striatus:** It is a typical linear variant of childhood, with spontaneous regression in a few months. It usually leaves a slight residual hypopigmentation.
- **Lichen nitidus (nitidus = shiny):** This granulomatous entity is considered by some as an independent entity and by others as a variant of LP. They are almost punctate and shiny lesions, rarely grouped.
- **Lichen aureus:** So called because of its resemblance to LP, it is actually a hemorrhagic-pigmentary dermatosis.

## 125. POLYPS\_ 00:59:42

Polyp, in medicine, is called the pedunculated tumor or soft excrescence that sometimes becomes hard and fleshy in appearance and is born in the mucous membranes such as the nose, throat, uterus, colon and rectum.

Sometimes they offer a fibrous texture and are called fibroid polyps. The so-called mucosal polyps have the consistency and color of the mucosa in which they are implanted and are covered by the same epithelium that lines the cavity (except those of the external auditory canal).

Most of them are made up of pre-existing mucous glands and other newly formed ones, so that in the concept of the richness of their elements they can be included among pure adenomas (mucosal polyps of the rectum in children) among anemosarcomas (many polyps of the nose), among edematous fibromas, and among myxosarcomas.

### **Types of polyps:**

Colorectal polyps in most cases are benign. That means they are not a cancer and do not spread. You can have one or multiple polyps. These become more common with age. They may be:

- **Adenomatous polyps.** Gland-like masses that develop in the mucous membrane lining the large intestine. They are also called adenomas and in most cases are one of the following:

- **Tubular polyp**, which protrudes in the center of the colon.

- **Villous adenoma**, which is flat, spreads, and is more likely to develop into cancer.

When adenomas become cancerous, they are known as adenocarcinomas: they are cancers that arise in cells of glandular tissue. Adenocarcinoma is the most common type of colorectal cancer.

### **Other types of polyps are:**

- **Hyperplastic polyps**, which generally do not transform into cancer.
- **Serrated polyp**, is less common, but can become cancer over time.

A small number of people who develop polyps may also be related to some inherited disorders, including:

- **Familial adenomatous polyposis (PAF).**
- **Gardner syndrome** (a type of PAF).
- **Juvenile polyposis** (disease that causes many non-cancerous tumors in the intestine, usually before the age of 20).
- **Lynch syndrome (HNPCC**, a disease that increases the risk of many types of cancer, including cancers of the intestine).
- **Peutz-Jeghers syndrome** (disease that causes polyps in the intestine).

## **126. PERIODONTITIS/ PYORRHEA\_**

**0:53:40**

**Periodontitis, commonly called pyorrhea or chronic periodontitis, is an inflammation and infection of the ligaments and bones that support the teeth.**

**Initially it can present with gingivitis, to later continue with a loss of collagen insertion, gingival recession and even bone loss, in the case of not being treated, leaving the tooth without bone support.**

**Periodontitis occurs when inflammation or infection of the gums (gingivitis) occurs and is not treated. Infection and inflammation spread from the gums (gingiva) to the ligaments and bone that support the teeth. Loss of support causes teeth to loosen and eventually fall out. Periodontitis is the main cause of tooth loss in adults. This disorder is not common in young children, but increases during the teenage years.**

**Plaque and tartar accumulate at the base of the teeth. The inflammation as a result of this accumulation causes "pockets" or gaps to form between the gum and the teeth. These pockets fill with tartar and plaque. Soft tissue inflammation traps the plaque in the pocket. Ongoing inflammation leads to damage to the tissues and bone around the tooth. Because plaque contains bacteria, infection is likely and an abscessed tooth can also occur. This also increases the rate of bone destruction.**

## **127. GINGIVITIS\_**

**0:57:05**

**Gingivitis or "gingivitis" is a generally bacterial oral disease that causes inflammation and bleeding of the gums, caused by food debris that gets trapped between the teeth.**

**It is very frequent that its origin is caused by the growth of the wisdom teeth, which produces a concavity, which is where the pathogen or bacteria is deposited.**

**When it appears it is not painful, but if it is not treated it can become periodontitis.**

**Gingivitis is a form of periodontal disease, that is, it is inflammation and infection that destroys the supporting tissues of the teeth. This can include the gums, periodontal ligaments, and tooth sockets (alveolar bone).**

**Gingivitis is due to the long-term effects of plaque deposits on the teeth. Plaque is a sticky material made up of bacteria, mucus, and food debris that accumulates on the exposed parts of the teeth.**

**It is also a major cause of dental caries.**

**If plaque isn't removed, it turns into a hard deposit called tartar (or calculus) that gets trapped at the base of the tooth. Plaque and tartar irritate and inflame the gums. Bacteria and the toxins they produce cause the gums to become infected, inflamed and sensitive.**

**Factors that may increase the risk of gingivitis:**

- Certain infections and diseases throughout the body (systemic).**
- Poor dental hygiene.**
- Pregnancy (hormonal changes increase the sensitivity of the gums).**
  
- Uncontrolled diabetes.**
- Misaligned teeth, rough edges of fillings, and misplaced or contaminated oral appliances (such as braces, dentures, bridges, and crowns).**
  
- The use of certain medicines such as phenytoin, bismuth and some birth control pills.**

**Many people have some amount of gingivitis. This usually appears during puberty or during the early stages of adulthood, due to hormonal changes.**

**It can persist or come back frequently, depending on the health of your teeth and gums.**

## CHILDREN (128-135)

### 128. ACNE\_ 0:59:35

Acne is a disease that affects the sebaceous glands. The small holes in the skin are called pores, and they connect to the sebaceous glands under the skin. These glands produce a fatty substance called sebum. The pores are connected to these glands through a channel called a follicle, and within these, sebum transports dead skin cells to the skin's surface. A fine hair also grows under the skin and passes through the follicle to reach the surface. When a follicle is clogged, a pimple or pimple is created.

Most pimples or blackheads are found on the face, neck, back, chest, and shoulders. Acne is not a serious health threat, but it can leave scars.

Sometimes hair, sebum and skin cells get together and create a plug in the pore. The bacteria that is present in the plug causes swelling. When the plug begins to break down, a pimple forms.

There are many types of grains. The most common are:

- White dots. These are pimples that stay below the surface of the skin.
- Black spots. These are pimples that rise to the surface of the skin and appear black; the black color is not due to the pore being dirty.
- Papules. These small bumps are pink in color and can hurt to the touch.
- Pustules. These pimples are red below and have pus above.
- Nodules. These are large, painful, solid pimples that are deep within the skin.
- Cysts. These are deep, painful, pus-filled pimples that can leave scars.

The exact cause of acne is not known. Doctors believe that certain factors can cause it, including:

- The hormonal increase during adolescence (this causes the glands to clog more often)
- Hormonal changes that occur during pregnancy - Starting or stopping birth control pills - Hereditary factors - Certain medications - Some types of makeup.

## **129 TONSILLITIS\_**

**1:06:40**

**Tonsils are lymph nodes found in the back of the mouth and in the upper part of the throat. Tonsillitis or angina is inflammation of one or both palatine tonsils (large, fleshy, oval masses of tissue that are on the lateral wall of the oropharynx on each side of the throat), caused by a viral or bacterial infection.**

**These tissue groups contain the cells that produce useful antibodies in the fight against infection, that is, they help eliminate bacteria and other microorganisms to prevent infections in the body.**

**Symptoms can be: difficulty swallowing, ear pain, fever, chills, sore throat that lasts more than 48 hours, jaw and throat tenderness, breathing problems if the tonsils are very large.**

## **130. AUTISM – TEA\_**

**1:03:36**

**Autism Spectrum Disorders (ASD) are a developmental disability that can cause significant social, communication, and behavioral problems. Most children with pervasive developmental disorders also have mental retardation (IQ below 70). Within children with autism, there is a wide spectrum of severity, with some having more severe symptoms and others milder.**

**Deficits in social interaction are probably the most characteristic and specific to children with autism. From an early age, children do not respond to the gestures and glances of the people around them, they do not seek contact with other people, they prefer to play alone. Serious problems in verbal and non-verbal communicative language, frequently do not have intelligible language or repeat the words they hear (echolalia), alter the order of the words or use them with particular meanings for them. Repetitive or stereotyped behaviors: they are only interested in one thing in an excessive and inflexible way, that they perform repeated rituals or routines without any function or stereotyped movements (such as flapping their hands).**

**The cause of autism is not known, although it is known to be a genetic disorder, since it is more common in siblings of children with autism (4.5% frequency in siblings of patients).**

**Autism could result from disruption of normal brain development early in fetal development, caused by defects in genes that control brain growth and regulate the way neurons communicate with each other. Up to 80% of children with autism are mentally retarded, and up to 35-40% suffer from epilepsy in the first 20 years of their lives. 5% have fragile X syndrome and others have suffered infections, such as meningitis, or have been affected by congenital rubella, phenylketonuria or tuberous sclerosis.**

**Children with autism often worsen when they have medical conditions or environmental stress. The possibility of accessing educational, pedagogical and support services have a beneficial effect, since even children with the most severe autism have the capacity to learn some adaptive skills.**

## **131. MEASLES\_ 1:11:27**

**Infectious and contagious disease, caused by a virus, characterized by the appearance of small red spots on the skin, high fever and catarrhal symptoms; It is generally suffered during childhood.**

**The incubation period for measles usually lasts 4-12 days, during which there are no symptoms. Infected people remain contagious from the onset of the first symptoms until 3-5 days after the appearance of the rash.**

**Measles is spread by contact with droplets from the nose, mouth, or throat of an infected person. Sneezing and coughing can send contaminated droplets into the air.**

## **132. MUMPS\_ 0:59:00**

**They are a contagious disease that causes painful inflammation of the salivary glands, which produce saliva, a liquid that moistens food and helps chewing and swallowing.**

**Mumps is caused by a virus. This is transmitted from one person to another through droplets of moisture from the nose or mouth, such as when a person sneezes.**

**It is also spread through direct contact with items that contain infected saliva.**

**Mumps occurs very frequently in children between the ages of 2 and 12. However, the infection can occur at any age and can also occur in college students. The time between exposure to the virus and becoming sick (incubation period) is approximately 12 to 25 days.**

### **133. CELIAC DISEASE\_ 1:02:49**

**Celiac disease is a condition caused by damage to the lining of the small intestine. This damage comes from a reaction to eating gluten.**

**This is a substance found in wheat, barley, rye, and possibly oats. And also in foods made with these ingredients.**

**The damaged intestine does not absorb the necessary components of food.**

**The exact cause of celiac disease is unknown. The lining of the intestines has small projections containing areas called villi, which project outward at the opening of the intestine. These structures help absorb nutrients.**

- When people with celiac disease eat gluten-containing foods, their immune system reacts by causing damage to these villi.**
- Due to this damage, the villi are unable to absorb iron, vitamins and nutrients properly.**
- Consequently, a series of symptoms and health problems may occur.**

**The disease can manifest at any time in life from infancy to late adulthood.**

**Celiac disease symptoms can be different from person to person. This can make diagnosis difficult. For example, one person may have constipation, a second may have diarrhea, and a third may not have any problems with bowel movements.**

**Gastrointestinal symptoms include:**

**Abdominal pain, bloating, gas or indigestion, constipation, decreased appetite (may also increase or remain unchanged), diarrhea, either constant or intermittent, lactose intolerance (common when the person is diagnosed and usually goes away with treatment), nausea and vomiting, foul-smelling, greasy stools, or stools that stick to the toilet when flushed, unexplained weight loss (although people may be overweight or normal weight).**



Other problems that can develop over time because the intestines do not absorb key nutrients include: Proneness to bruising, depression or anxiety, fatigue, stunted growth in children, hair loss, itchy skin ( dermatitis herpetiformis), absence of menstrual periods, mouth ulcers, muscle cramps and joint pain, nosebleeds, seizures, numbness or tingling in hands or feet, unexplained short stature.

Children with celiac disease may have:

- Defects in dental enamel and discoloration of teeth
- Delayed puberty
- Diarrhoea, constipation, foul-smelling or greasy stools, nausea or vomiting
- Irritable or finicky behavior
- Poor weight gain
- Slow growth and height below normal for his age

In children, for example, gluten intolerance can be detected when the porridge is introduced into their diet. Children tend to be more irritable, and a loss of weight and size can be perceived. Normally, they have thin arms and legs and a larger belly.

## 134. TETANUS\_

1:08:00

It is an infection of the nervous system with a potentially deadly type of bacteria called *Clostridium tetani* (C tetani).

Its spores are found in the soil, in feces, and in the mouth (gastrointestinal tract) of animals. In its spore form, C tetani can remain dormant in soil and still remain infectious for more than 40 years.

Tetanus infection can be contracted when the spores enter the body through an injury or wound. The spores become active bacteria that spread throughout the body and produce a poison called tetanus toxin (also known as tetanospasmin).

This poison blocks nerve signals from the spinal cord to the muscles, causing intense muscle spasms. The spasms can be so strong that they tear muscles or cause spinal fractures. The time between infection and the first sign of symptoms is approximately 7 to 21 days.

**Tetanus often begins with mild spasms of the jaw muscles (lockjaw). The spasms can also affect the chest, neck, back, and abdominal muscles. Back muscle spasms often cause arching, called opisthotonos.**

**Sometimes the spasms affect the muscles that help you breathe, which can lead to breathing problems.**

**Other symptoms include:**

**Droping, excessive sweating, fever, hand or foot spasms, irritability, difficulty swallowing, uncontrollable urination or bowel movements**

## **135. MENINGITIS\_**

**0:57:05**

**It is an infection of the membranes that cover the brain and spinal cord. The cover is called meningitis.**

**The most common causes of meningitis are viral infections. These infections usually get better without treatment.**

**However, bacterial meningitis infections are extremely serious. They can cause death or brain damage even with treatment.**

**Anyone can get meningitis, but it is more common in people with weak immune systems. Meningitis can get serious very quickly.**

**Some of the symptoms may be:**

- Sudden fever.**
- Strong headache.**
- Neck stiffness.**
- Nausea or vomiting.**

**Meningitis can also be caused by:**

- Chemical irritation.**
- Allergies to medications.**
- Fungus.**
- Parasites.**
- Tumors.**

**Many other types of viruses can cause meningitis:**

- **Enterovirus:** These are viruses that can also cause intestinal diseases.
- **Herpes viruses:** These are the same virus that can cause cold sores and genital herpes. However, people with cold sores or genital herpes are not at increased risk of developing herpetic meningitis.
- **Viruses that can cause mumps and HIV can cause aseptic meningitis.**
- **West Nile virus:** This virus is spread through mosquito bites and has become a cause of viral meningitis in most of the United States.

**Viral meningitis occurs more often than bacterial meningitis and is milder. It usually occurs in late summer and early fall. It most often affects children and adults under 30 years of age.**

**Bacterial meningitis is an emergency and immediate treatment in a hospital will be needed.**

**Symptoms usually come on quickly and can include:**

**Fever and chills (especially in newborns and children), mental status changes, nausea and vomiting, sensitivity to light (photophobia), severe headache, stiff neck (meningismus).**

**Other symptoms that can occur with this disease:**

- **Agitation.**
- **Bulging fontanelles in babies.**
- **Decreased state of consciousness.**
- **Deficient feeding or irritability in children.**
- **Fast breathing.**
- **Unusual posture with the head and neck arched backwards (opisthotonos).**