



Fight against tumors



Hey, we are the French people ! In the powerpoint, we are going to present you the subject "fight against tumors", a very interesting topic. It's a topic that deals with health so in relation to current events with the coronavirus...

Good viewing !

What are we going to talk about?

First and foremost, we will talk about the notion of tumor and understand what it is.

On the more scientific side, we'll talk about cancer.

We'll conclude on how we can fight against cancer by giving some advices and the treatments.

What's a tumor ?

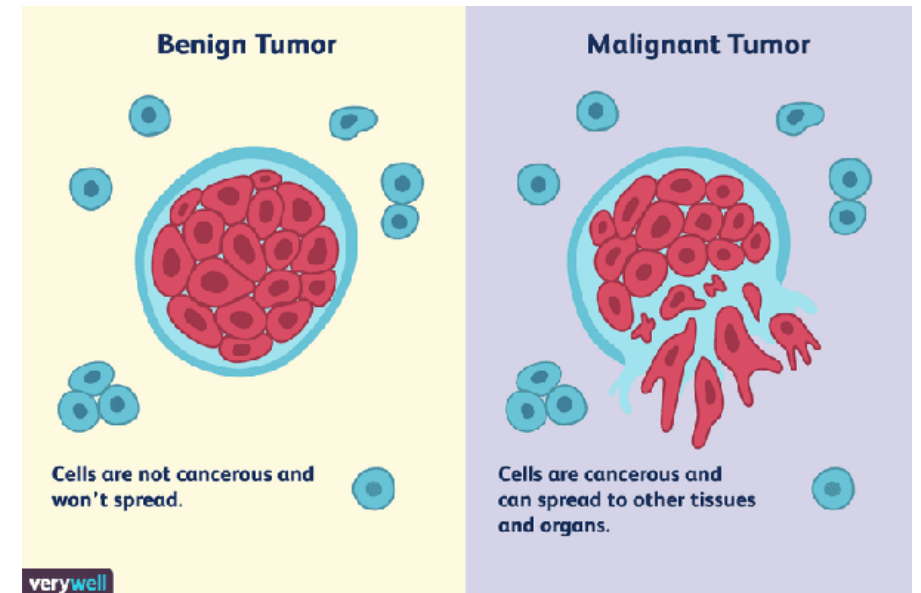
A tumor is an abnormal mass of tissue that may be benign (not cancerous) or malignant (cancerous).

There are hundreds of different types of tumors. Their names usually reflect the kind of tissue they arise in, and may also tell you something about their shape or how they grow.

Diagnosis depends on the type and location of the tumor.

Some tumors can be seen (for example, tumors on the exterior of the skin) or felt (palpated with the hands).

Treatment is also specific to the location and type of the tumor.





What can cause mutation ?

The causes of genetic mutations are generally not well known. Genetic mutations can be caused by environmental factors, such as air pollution or radiation, but can also occur spontaneously from one generation to the next without apparent cause.

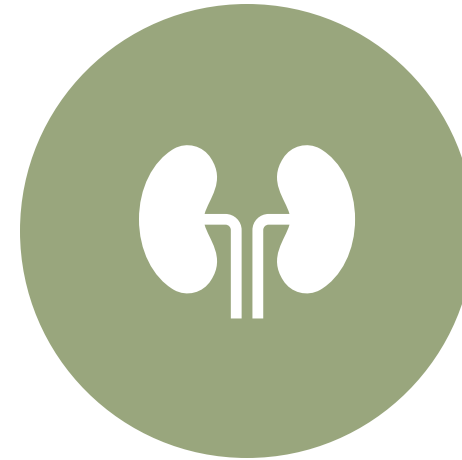
What's the difference between good and bad tumors ?

There is no such thing as a good tumor. These masses of mutated and dysfunctional cells may cause pain and disfigurement, invade organs and, potentially, spread throughout the body. But not all tumors are malignant, or cancerous, and not all are aggressive. Benign tumors, while sometimes painful and potentially dangerous, do not pose the threat that malignant tumors do. "Malignant cells are more likely to metastasize" If cancer cells metastasize, they spread to other parts of the body and cause tumors to grow there.

What's the difference between cancer and tumor?



CANCER IS A DISEASE IN WHICH CELLS, ALMOST ANYWHERE IN THE BODY, BEGIN TO DIVIDE UNCONTROLLABLY. A TUMOR IS WHEN THIS UNCONTROLLED GROWTH OCCURS IN SOLID TISSUE SUCH AS AN ORGAN, MUSCLE, OR BONE.



TUMORS MAY SPREAD TO SURROUNDING TISSUES THROUGH THE BLOOD AND LYMPH SYSTEMS. CANCER TREATMENT AIMS TO ERADICATE THESE ABNORMAL CELLS, OR TO SLOW OR STOP THEM FROM SPREADING.



What kind of tumors are the most "common" in France ?

Most common cancers in women

breast (52,500 cases)

colorectal (19,000)

lung (10,000)

Most common cancers in men

prostate (53,000 cases)

lung (27,000)

colorectal (21,000)

Which tumor has the highest mortality rate?

In 2012, it was estimated that there were 148,000 deaths from cancer : 85,000 men and 63,000 women. For men, lung cancer is the main cause of death, followed by colorectal and prostate cancers. For women, it's breast cancer followed by colorectal and lung cancer.

Hepatitis virus can cause liver cancer. How can a virus infect a healthy cell?

Hepatitis B and C viruses are a global health problems causing acute and chronic infections that can lead to liver cirrhosis and hepatocellular carcinoma (HCC). These infections are the leading cause for the HCC worldwide and are associated with significant mortality, accounting for more than 1,3 million death per year.

Several viruses besides HPV have been linked to cancer, including hepatitis C, which is linked to liver cancer.

This ongoing infections causes inflammation in the liver. This extended inflammation can cause scarring, called cirrhosis and can ultimately lead to liver cancer.

It's a very clever virus that mutates very fast so it has been difficult to develop a vaccine.



What is the most appropriate lifestyle to avoid cancer?

Concerning eating habits :

- > avoid eating meat : mostly red meat
- > eat plenty of fruits and vegetables,
- > consume whole grains instead of processed grains,
- > drink alcohol in moderation
- > don't use tobacco,
- > drink regularly coffee.

Concerning lifestyle habits :

- > Exercise often
- > Visit your doctor regularly
- > Make sure your vaccinated
- > Maintain a healthy weight
- > Limit your screen time
- > Check your skin

What are the most common symptoms of cancer? With how much percentage can you reduce the risk of death with an early diagnosis?

- *Persistent cough or blood-tinged saliva
- *A change in bowel habits
- *Blood in the stool
- *Unexplained anemia (low blood count)
- *Breast lump or breast discharge
- *Lumps in the testicles
- *A change in urination



“A screening test reduces the risk of dying from cancer by 20 percent”.

What is chemotherapy? How does this treatment help people?



Chemotherapy can be used to shrink a tumor so that other treatments, such as radiation and surgery, are possible. Doctors call this neoadjuvant therapy.

To ease signs and symptoms. Chemotherapy may help relieve signs and symptoms of cancer by killing some of the cancer cells.

Chemotherapy is a drug treatment that uses powerful chemicals to kill fast growing cells in your body.

Chemotherapy is most often used to treat cancer, since cancer cells grow and multiply much more quickly than most cells in the body.

Many different chemotherapy drugs are available. Chemotherapy is the use of drugs to destroy cancer cells.

It usually works by keeping the cancer cells from growing, dividing,

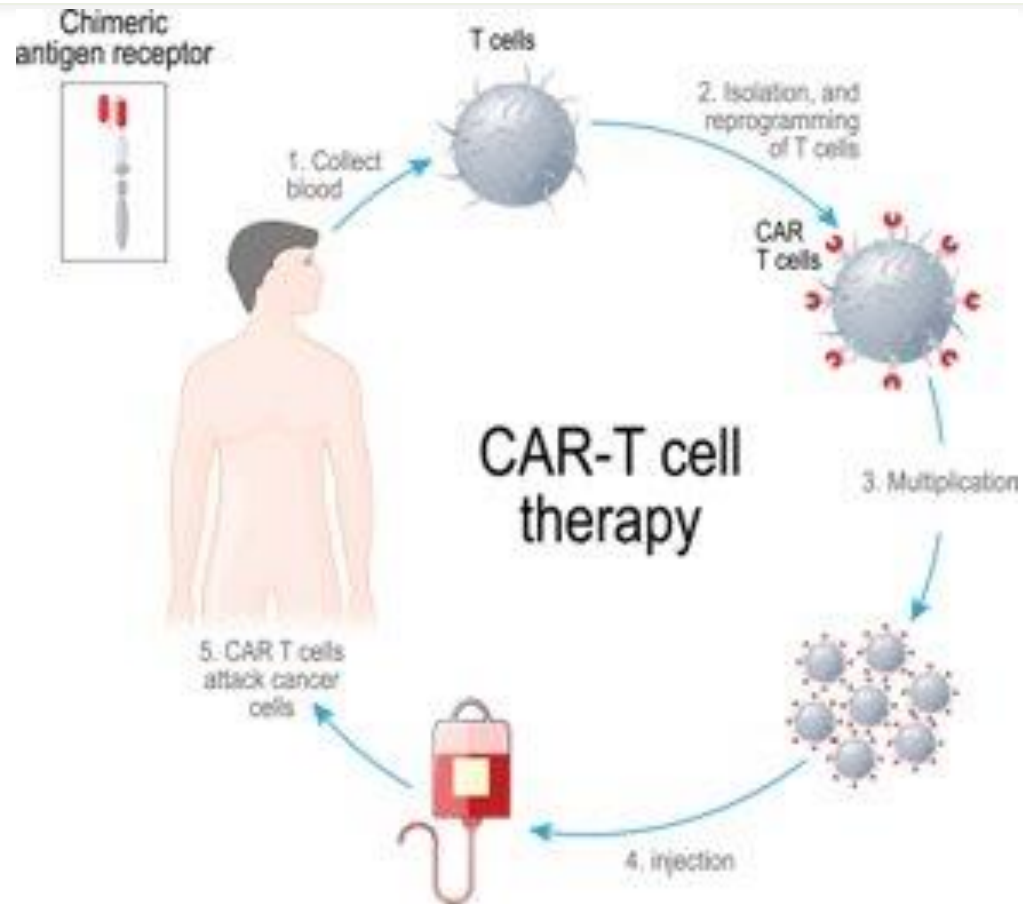
and making more cells. Because cancer cells usually grow and divide faster than normal cells, chemotherapy has more of an effect on cancer cells.

What's the newest cancer treatment? How effective it is?

The FDA has approved a form of gene therapy called CAR T-cell therapy. It uses some of your own immune cells, called T cells, to treat your cancer. Doctors take the cells out of your blood and change them by adding new genes so they can better find and kill cancer cells.

Although gene therapy is a promising treatment option for a number of diseases (including inherited disorders, some types of cancer, and certain viral infections), the technique remains risky and is still under study to make sure that it will be safe and effective.

CAR-T cell therapy



Thanks you for watching,
hope it was interesting !

