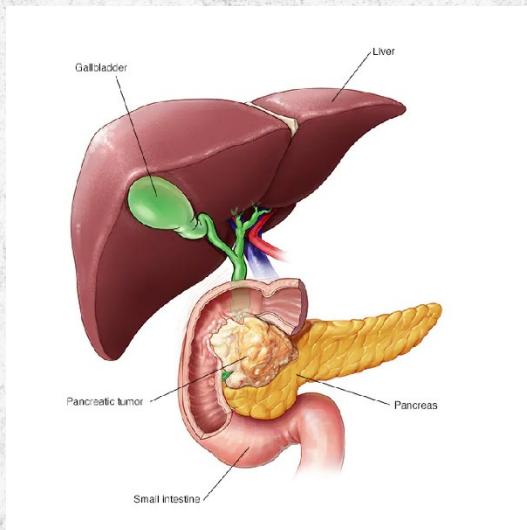


## Pancreatic Cancer



Pancreatic cancer begins in the tissues of the pancreas (an organ in your abdomen that lies behind the lower part of your stomach). The pancreas releases enzymes that aid digestion and produces hormones that help manage your blood sugar.

Several types of growths can occur in the pancreas, including cancerous and noncancerous tumors. The most common type of cancer that forms in the pancreas begins in the cells that line the ducts that carry digestive enzymes out of the pancreas (pancreatic ductal adenocarcinoma).

### Symptoms:

Signs and symptoms of pancreatic cancer often show in the advanced stages of the disease. They may include:

- Abdominal pain that radiates to the back
- Loss of appetite or unintended weight loss
- Yellowing of your skin and the whites of the eyes (jaundice)
- Light-colored stools
- Dark-colored urine
- Itchy skin

- New diagnosis of diabetes or existing diabetes that's becoming more difficult to control
- Blood clots
- Fatigue

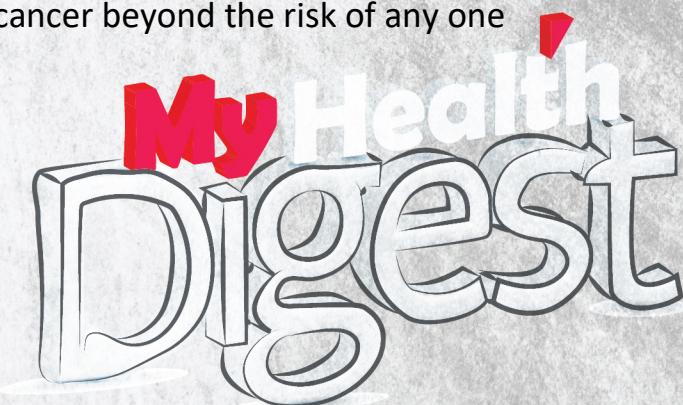
## Causes:

It's unclear what causes pancreatic cancer. Doctors have identified some factors that may increase the risk including smoking and having certain inherited gene mutations.

## Risk Factors:

- Smoking
- Diabetes
- Obesity
- Chronic inflammation of the pancreas
- Family history of genetic syndromes that can increase cancer risk
- Family history of pancreatic cancer
- Older age, as most people are diagnosed after age 65

A study demonstrated that the combination of smoking, long-standing diabetes and a poor diet increases the risk of pancreatic cancer beyond the risk of any one of these factors alone.



## **Complications:**

- Weight loss: because of several causes like: the cancer consumes the body's energy. Nausea and vomiting caused by cancer treatments or a tumor pressing on the stomach make it difficult to eat. Or the body may have difficulty processing nutrients from food because the pancreas isn't making enough digestive juices.
- Jaundice: Pancreatic cancer that blocks the liver's bile duct can cause jaundice.
- Pain: A growing tumor may press on nerves in your abdomen, causing pain.
- Bowel obstruction: Pancreatic cancer that grows into or presses on the first part of the small intestine (duodenum) can block the flow of digested food from the stomach into the intestines.

## **Prevention:**

- Maintain a healthy weight. If you are at a healthy weight, work to maintain it. If you need to lose weight, try to lose weight by losing 0.5



to 1 kilogram a week. Combine daily exercise with a diet rich in vegetables, fruit and whole grains to help you lose weight.

- If you smoke, try to stop.

### **Treatment:**

Treatment for pancreatic cancer depends on the stage and location of the cancer as well as on your overall health. Treatment may include surgery, radiation, chemotherapy or a combination of these.

### **Surgery:**

- Surgery for tumors in the pancreatic head. If your cancer is located in the head of the pancreas, you may consider an operation called a Whipple procedure
- Surgery for tumors in the pancreatic body and tail. Surgery to remove the left side (body and tail) of the pancreas is called distal pancreatectomy. Your surgeon may also need to remove your spleen.
- Surgery to remove the entire pancreas
- Surgery for tumors affecting nearby blood vessels. Many people with advanced pancreatic cancer aren't considered eligible for the Whipple procedure or other pancreatic surgeries if their tumors involve nearby blood vessels

### **Chemotherapy**



Chemotherapy uses drugs to help destroy cancer cells. These drugs can be injected into a vein or taken orally. The patient may receive one chemotherapy drug or a combination of them. Chemotherapy can also be combined with radiation therapy (chemoradiation)

### **Radiation therapy**

Radiation therapy uses high-energy beams, such as those made from X-rays and protons, to destroy cancer cells. The patient may receive radiation treatments before or after cancer surgery, often in combination with chemotherapy.

### **Clinical trials**

Clinical trials are studies to test new treatments and drugs, and new approaches to surgery or radiation therapy. If the treatment being studied proves to be safer and more effective than current treatments, it can become the new standard of care.

Clinical trials for pancreatic cancer might give the patient a chance to try new targeted therapy, chemotherapy drugs, immunotherapy treatments or vaccines.

Clinical trials can't guarantee a cure, and they might have serious or unexpected side effects. On the other hand, cancer clinical trials are closely monitored to ensure they're conducted as safely as possible. And they offer access to treatments that wouldn't otherwise be available to the patient.

