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INFORMATION ABOUT

ACUTE PANCREATITIS

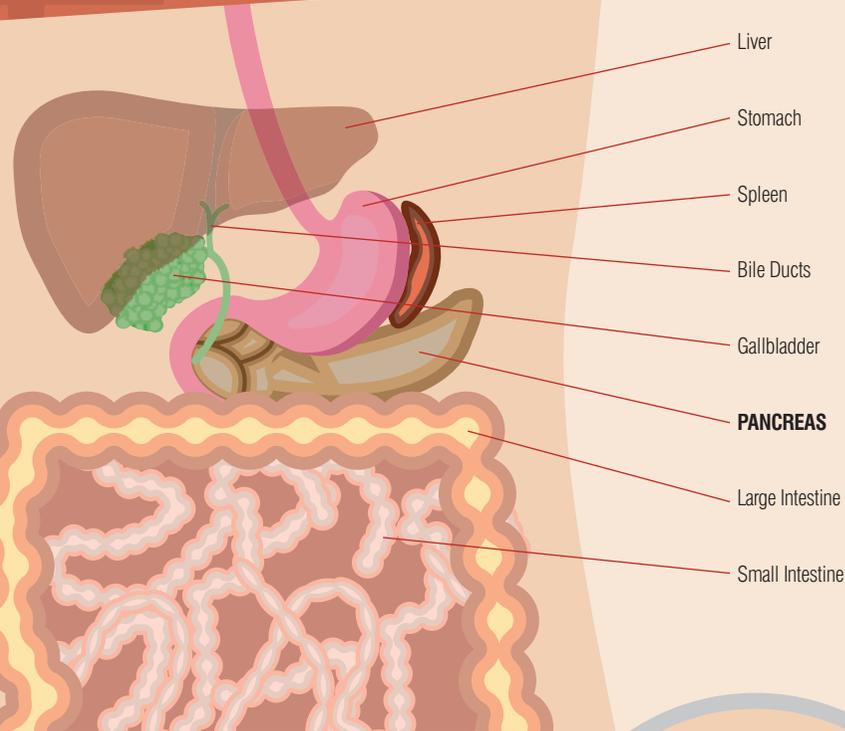
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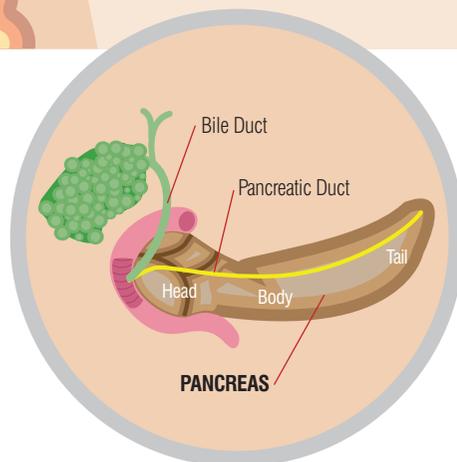
ACUTE PANCREATITIS

The pancreas is part of the digestive system. It lies in the upper half of the abdomen behind the stomach and in front of the spine. It is a solid flat gland about nine inches long, salmon pink in colour and shaped like a comma.



WHAT DOES IT DO?

The pancreas has two main functions. It produces digestive juices (enzymes which help to digest food) and hormones, including insulin (a hormone which balances the sugar in the blood). The digestive juice flows into the duodenum and mixes with the food and bile to digest food. It also produces other hormones, which help with digestion and bicarbonate to balance the acid from the stomach.



WHAT IS ACUTE PANCREATITIS?

Acute pancreatitis is sudden inflammation of the pancreas gland. When the pancreas gets inflamed some of the digestive enzymes produced by the pancreas become active within the gland, causing damage by digesting the pancreas itself. This damage can sometimes be mild, and the gland becomes red, angry and swollen. In severe cases, the pancreas, the arteries inside the pancreas or fat surrounding the pancreas can become affected causing swelling and destruction of the tissues. Sometimes the damage can be so bad that the pancreas can lose its blood supply and die – this is called necrotising pancreatitis.

The damage that results from pancreatitis is unpredictable and can be minimal. However sometimes it can become extensive, which is why it can be so serious. Fortunately about three quarters of people have the mild form.

WHAT CAUSES ACUTE PANCREATITIS?

Gallstones and drinking too much alcohol are the two most common causes.

There are many causes of acute pancreatitis but in the UK, the two most common are gallstones and alcohol².

- ✔ Gallstones cause problems when small stones pass out of the gallbladder into the bile duct and temporarily block the pancreas.
- ✔ Alcohol is a toxin to the pancreas and some people are more susceptible to damage from alcohol than others. Damage occurs both with binge drinking and regular excess drinking³.

Less common causes include:

- Following trauma
- Some viral infections
- Side effect of some drugs - for example azathioprine and steroids
- Genetic abnormalities of the enzyme trypsin that is made by the pancreas
- Pancreas divisum – when the pancreas develops in two halves
- Hypertriglyceridemia – high fats in the blood
- Rarely as a complication of pancreas cancer
- Following endoscopy tests on the pancreas (also rare)
- And occasionally the cause is never found⁴

WHAT SYMPTOMS DO YOU GET?

People get sudden onset of abdominal pain, usually starting in the upper abdomen. This can be very severe and is often accompanied by vomiting. It is usually so severe that a hospital admission is necessary. Usually patients stay 5-10 days in hospital or longer if complications develop.

HOW IS IT DIAGNOSED?

The diagnosis of acute pancreatitis is based on the typical symptoms described earlier followed by the finding of tenderness in the upper abdomen. Sometimes this tenderness can be all over the abdomen. Usually chest and abdominal X-rays and blood tests are performed. In acute pancreatitis, the levels of the enzymes, particularly amylase and lipase that are produced by the pancreas are raised.

An ultrasound scan is usually performed next to determine whether gallstones are present, whether the bile duct is dilated and if the pancreas appears to be swollen. A CT scan may be necessary to rule out other possible causes of pain if these tests are not helpful.

HOW CAN ACUTE PANCREATITIS BE TREATED?

Nothing helps to stop the inflammation of acute pancreatitis. Basic treatment such as fluids through a drip and oxygen are required and usually a catheter is necessary to monitor urine output. A nasogastric tube is often inserted to provide nutrients to the patient.

The inflammation can affect other organs and some people with acute pancreatitis can develop problems with their chest and kidneys.

Diabetes may occur and this requires treatment with drugs, insulin or other drugs.

The abdominal pain can be severe and needs treatment with opiates such as morphine. Although antibiotics can sometimes be necessary, they are not routinely used because pancreatitis is not an infection.

Sometimes people get better quickly and are able to eat and drink within a few days but sometimes tube-feeding is required. Fortunately most people have only mild inflammation and settle, but some develop complications⁵. Sometimes an examination called an ERCP can be required, especially when there is a hold up of bile from the liver or signs of infection in the bile duct – known as cholangitis.

Once people start getting better then it is very important to search for and treat any underlying cause. For example if gallstones are present these should be removed – usually by laparoscopic cholecystectomy (keyhole removal of the gallbladder). This is best done before a patient with pancreatitis and gallstones goes home or certainly within 2 weeks. If the cause is high alcohol intake then alcohol should be stopped completely. This may require specialised help as this is difficult alone.

WHAT COMPLICATIONS CAN OCCUR?

- Low blood pressure or fast heart rate needing intravenous fluid by a vein.
- Breathing problems needing oxygen or rarely breathing support provided in an intensive care unit.
- Fluid can develop around the pancreas and sometimes cysts can form. Most of these settle themselves but can sometimes need to be drained.
- The pancreas can sometimes lose its blood supply, either in patches or the whole gland. This is called necrosis and can be a very serious complication especially if the tissue gets infected. This needs a longer hospital stay – typically 3 months. Transfer to a hospital or team specialising in the treatment of severe acute pancreatitis may be necessary.
- The disease can be so severe that a minority of patients die: the overall mortality of acute pancreatitis is 5%, rising to 25% if complications, though rare, develop.⁶

FURTHER RESEARCH NEEDED

Pancreatitis can cause major illness and nothing has been found yet which can switch off the inflammation. Specific research is needed into exactly how the inflammation is triggered in the pancreas cells with further research required to investigate the best way of treating any complications that occur as well as preventing these complications if possible. It is also important to identify what factors make some individuals more susceptible than others to this severe illness.

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Conditions that affect the gut, the liver and the pancreas (collectively known as digestive diseases) are widespread but little known. They can cause significant health problems for people who live with them and, sadly, they are a factor in 1 in 8 UK deaths. Core is the only national charity working to change this by fighting all digestive diseases. As a charity, Core:

- Supports important medical research that looks for cures and for ways of improving the lives of patients;
- Provides evidence-based information that enables patients and families to understand and control their condition;
- Works to raise awareness of these conditions, their symptoms and impact.

THERE ARE MANY WAYS YOU CAN SUPPORT OUR WORK NOW:

- Call us on **020 7486 0341**
- Text **CORE14** plus your donation amount to **70070**
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You can find more information about digestive diseases and about Core's work by visiting our website at **www.corecharity.org.uk** or by calling **020 7486 0341** during office hours.

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This leaflet was published by Core in 2014 and will be reviewed during 2016. If you are reading this after 2016 some of the information may be out of date. This leaflet was written under the direction of our Medical Director and has been subject to both lay and professional review.

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