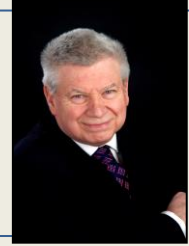


# Medicine for Managers

Dr Paul Lambden BSc MB BS BDS FDSRCS MRCS LRCP DRCOG MHSM



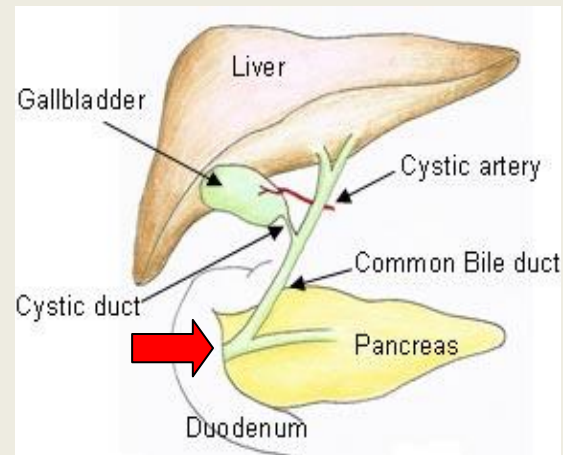
## Acute Pancreatitis

**The pancreas lies in the abdomen behind the stomach. It manufactures enzymes in pancreatic cells which are involved in the digestion of food and it also contains groups of cells called Islets of Langerhans which produce the hormones insulin and glucagon and which are essential for the control of blood sugar. Inflammation of the pancreas is called pancreatitis.**

Pancreatitis may develop quickly as an acute inflammation causing an often severe and debilitating disorder which may be serious. It may resolve without sequelae after a few days, may be recurrent or may become chronic. Chronic pancreatitis is associated with progressive damage and the development of scarring which compromises its functions.

Acute pancreatitis affects about 1 person in every 20,000 each year. It is becoming more common, probably because of increasing **alcohol** use and abuse. The way in which the alcohol leads to the acute inflammation of the pancreas is not understood but attacks frequently follow a heavy drinking session. The other prime cause is **gallstones** which actually block the outlet of the pancreas. Gallstones form in the gall bladder in susceptible patients. In some patients they pass into the cystic duct and

from there into the common bile duct, which may become blocked where it joins the duodenum (marked by the red arrow) or where the pancreatic duct joins the bile duct itself.



The obstruction prevents the digestive enzymes from passing from the pancreas to the duodenum and their collection in the pancreas itself damages the organ causing pancreatitis.

Men are more likely to experience alcohol related pancreatitis whilst women are more likely to have gallstones.

Other causes of pancreatitis are rare and include infections of various types, injury, and autoimmune disease (the development of an illness because the body mistakenly identifies itself as 'foreign' and attacks its own tissues). About one in ten of cases is without identified cause.

Essentially the disease occurs because the digestive enzymes manufactured in the pancreas are unable to reach the duodenum to digest the food within it. Instead they start to 'digest' the pancreas setting up the acute inflammatory response. In most cases the episode is self-limiting and lasts about a week. During that period the symptoms are increasing pain in the epigastric (midline of the abdomen just below the ribs) which may become severe. Other features include a high temperature, rapid pulse, vomiting, abdominal distension and anorexia (loss of appetite).

In about twenty percent of cases the progress of the disease is more serious; large parts of the pancreas may die and the damage may spread to neighbouring organs with the development of peritonitis. Patients may then develop generalised abdominal pain, high temperature and rigors (shivering episodes) and dehydration

leading on to shock with a fall in blood pressure, kidney failure and potentially very serious and sometimes fatal total collapse.

Complications of acute pancreatitis include abscess formation and, occasionally, bleeding into the pancreas.

Management of an acute attack is by admission to hospital. Diagnosis is usually made initially by blood tests including amylase levels (amylase is an enzyme made by the pancreas). Further tests may include abdominal ultrasound, a CT scan of the abdomen or an endoscopic ultrasound (where a gastroscop fitted with an ultrasound probe obtains an internal ultrasound picture of the pancreas and bile duct). There is no specific treatment for the condition. It is usually managed by the use of analgesics, antibiotics, intravenous fluids and general surgical supportive treatment. With protracted vomiting, the patient may need a naso-gastric tube to aspirate the stomach contents. In very severe cases the patient may be treated in an intensive care unit and may require intravenous feeding. It may be necessary to remove a gallstone lodged in the common bile duct or to operate to remove areas of destroyed pancreas. In general patients stay in hospital for five to ten days.

In general the prognosis for pancreatitis is good and most patients recover without

sequelae. However, cholecystectomy (removal of the gall bladder) should be undertaken if gallstones are present and the patient should drink no alcohol for at least six months after an attack. After that the consumption should not exceed the maximum recommended quantity of 3-4 units a day for men and 2-3 units a day for women.

[paulambden@compuserve.com](mailto:paulambden@compuserve.com)