

Can we prevent pancreatic cancer?

Difficulty in detecting pancreatic cancer means it is often diagnosed too late, but there are ways those at risk can protect themselves,

The sad death of Apple's Steve Jobs has turned the spotlight again on a form of cancer which also killed opera star Luciana Pavarotti and actor Patrick Swayze, both of who were diagnosed in the late stage of pancreatic cancer.

According to the Hong Kong Cancer Registry, there were 448 new cases of pancreatic cancer in 2008, of those 426 patients died. This high mortality rate is related to delayed diagnosis due to the fact that the pancreas is hidden behind the stomach and deep inside the abdomen, making early detection of pancreatic cancer difficult.

When symptoms such as weight loss, jaundice, stomach pain and palpable mass appear, it is usually already in the late stages. Unfortunately, the five year survival rate for late presented pancreatic cancer case is minimal.

Those most at risk are older males, chronic smokers, and people with a family history of the cancer and certain genetic diseases. Patients with underlying chronic pancreatitis, pancreatic cystic lesion, and metabolic syndrome (central obesity with diabetes) are also susceptible.

Multiple studies have confirmed diabetes is more common in patients with pancreatic cancer and there is an eight times higher risk of harbouring pancreatic cancer in people with recent onset of diabetes.

Patients with pancreatic cystic lesions also have up to 22 times the risk of developing pancreatic cancer in their life compared to the normal population. For these at-risk groups screening should be considered.

Currently there is no blood test that can confidently detect or exclude the presence of pancreatic cancer and The American Cancer Society does not recommend the use of the tumour marker (i.e. CA 19.9) for pancreatic cancer screening.

In addition, the detection rate is far from satisfactory with trans-abdominal ultrasound, and although CT scans are better, radiation exposure prevents it being a screening tool.

However, in clinical trials two methods - magnetic resonance imaging (MRI) and endoscopic ultrasonography (EUS) – have shown promise.

MRI uses a high magnetic field, rather than radiation, to scan the body making it suitable for repeated examinations of patients at risk.

The second method, the EUS, is a specialized endoscope equipped with a high frequency ultrasound probe at the tip which can be guided into different parts of the pancreas by an endoscopist.

It produces a high resolution image (as fine as 0.1mm) of the pancreas when performed through the stomach and duodenum. Compared to CT scans and MRI, EUS has a higher sensitivity, positive and negative predictive values in detecting and excluding the presence of pancreatic tumours.

In addition, if a tumour is spotted during the procedure, the endoscopist can use EUS guided fine needle aspiration to obtain a tissue sample for laboratory confirmation of the diagnosis.

For patients with pancreatic cystic disease undergoing an EUS, it is currently recommended to take a sample of the cystic fluid for analysis to differentiate between a benign and malignant lesion before considering surgery.

Although, it is not possible to change the inherited factors believed to put people at risk to pancreatic cancer, it is possible to make lifestyle changes to lessen the risk, such as controlling body weight to prevent obesity, and avoiding smoking and heavy drinking, which can cause chronic pancreatitis.

Eating more fruit and vegetables daily and less processed and red meat may also help cut the risk.

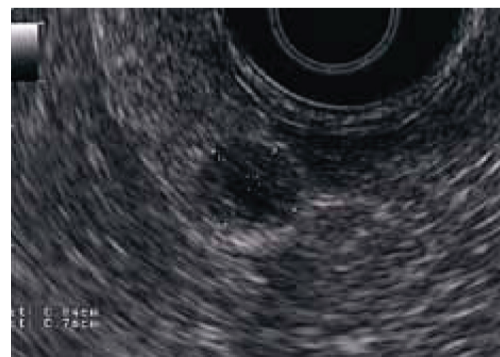
However, for patients with persistent epigastric symptoms (stomach pains) who do not respond to ordinary therapy, further investigation with a high sensitivity test such as EUS should be considered.



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EUS scope



Small pancreatic tumour