



Pancreatic Cysts

Overview

• What is the Pancreas?

The pancreas is an important organ that lies in the abdomen behind the stomach. People do not often think about the pancreas until there is some abnormality such as pancreatitis, pancreatic cyst or pancreatic cancer. The pancreas has two main functions: digestion and blood sugar regulation. The pancreas produces many enzymes that are secreted out of a small duct into the intestine that help breakdown proteins, carbohydrates and fats to allow for absorption. Separately the pancreas produces hormones (insulin the most well known) that are secreted into our blood stream that helps regulate our blood sugar.

• What are pancreatic cysts?

Pancreatic cysts are abnormal fluid collections either within the pancreas. The fluid can either be within the pancreatic tissue itself or an outpouching/dilation of one of the many ducts that are within the pancreas. There are many different types of pancreatic cysts. Some pancreatic cysts can be related to prior episodes of inflammation of the pancreas (pancreatitis). Other cysts can be benign fluid collections and lastly some cysts can have risk for developing into cancer over time. It is for this reason that correctly identifying which type of cyst you have is very important because it affects how it is managed over time.

■ How common are pancreatic cysts?

Pancreatic cysts are very common. It is estimated that up to 13.5% of patients will have a pancreatic cyst if a proper type of study to look for cysts is performed. The vast majority of cysts have no symptoms and are discovered completely incidentally ie. A CT scan or MRI for another reason. For example, a patient presenting to the hospital as a trauma after a car accident may get a CT scan of the abdomen as part of the trauma work up and a small pancreatic cyst is discovered unrelated to the car accident. It is thought that pancreatic cysts increase with age.

■ Why do we care about pancreatic cysts

Certain pancreatic cysts have a risk factor for developing into pancreatic cancer. By identifying pancreatic cysts and properly evaluating and treating these specific patients, it is possible to not only identify very early pancreatic cancers but in some cases to prevent pancreatic cancer itself with major surgery. Luckily, the majority of pancreatic cysts do not develop into cancer. In most patients we follow them closely over time to look for subtle clues that the cyst is changing before we ever recommend major surgery.

How do we evaluate pancreatic cysts?

Pancreatic cysts are typically evaluated through a combination of different imaging tests including CT scan, MRI and endoscopic ultrasound (EUS). EUS is a specialized test done with an endoscope in the stomach and the intestine that has an ultrasound probe on the end. The pancreas lies behind the stomach and doctors can thoroughly examine and even sample the cyst itself if needed using the endoscope in the stomach. The important factors that we look at for cysts are the size, the fluid type, the shape of the ducts of the pancreas and if there are any symptoms associated with the cyst such as pain, inflammation (pancreatitis) or yellow eyes/skin.

■ How are pancreatic cysts treated?

The vast majority of pancreatic cysts never require any treatment. If the cyst is related to prior episodes of inflammation of the pancreas, it will occasionally need to be drained if the cyst is causing symptoms or is infected. This typically only occurs with very large cysts. If the cyst is a precancerous cyst then typically it is followed over time with imaging such as CT, MRI or EUS. If the cyst changes over time or has certain concerning features then surgical resection may be indicated to reduce the risk of developing pancreatic cancer.