

General Surgery & Surgical Oncology

Pancreatoduodenectomy (the Whipple Procedure)

Pancreatoduodenectomy is commonly referred to as the Whipple procedure and is named after Allan Whipple, MD, a physician who perfected the surgery in the 1930s. The Whipple procedure is the most common operation to remove pancreatic cancers. The Whipple procedure may also be used to treat some benign pancreatic lesions and cysts and cancers in the bile duct and beginning part of the small intestine (duodenum).

Whipple Procedure and Pancreatic Cancer

At the time of diagnosis, pancreatic cancer is often found to have already metastasized (spread to other organs) and these patients will not benefit from surgical removal of their primary tumor. Surgery can be performed as a potentially curative measure if the cancer is contained within the pancreas and has not spread to blood vessels, lymph nodes or other organs. This treatment option should be discussed with your physician to see if it is a viable option. The type of operation performed for removal of pancreatic cancer is based on the location of the tumor. For tumors of the head and neck of the pancreas the Whipple procedure is performed. Tumors that grow in the body and tail of the pancreas are removed through a surgery known as a distal pancreatectomy.

Procedure

The goal of the Whipple procedure (pancreatoduodenectomy) is to remove the head of the pancreas. This is where most tumors occur. Because the pancreas is so integrated with other organs, the surgeon must also remove the first part of small intestine (duodenum), the gallbladder, the end of the common bile duct and sometimes a portion of the stomach. In the reconstruction phase of the operation, the intestine, bile duct and remaining portion of the pancreas are reconnected.

Complications and Outcomes

The most common post-surgical complication of pancreatoduodenectomy is leaking of pancreatic juices from the incision. If this occurs, a drain may be inserted through the skin to allow drainage for several weeks after surgery. Weight loss is another frequent complication of the Whipple procedure. Diabetes is a potentially serious concern for some people (a minority) after surgery. In general, although many people do very well after the Whipple procedure, some develop immediate complications that affect their quality of life.

When should I call my health care provider?

Call your provider if:

- You develop a fever over 100°F (37.8°C).
- You have any change or worsening of pain or symptoms.
- You have unusual drainage from the surgery area (including bloody drainage).
- You see blood in your stool.

Still, even in the best of hands, many patients suffer complications from the surgery.

These can include:

Leaking from the various connections among organs that the surgeon has to make

Infections

Bleeding

Trouble with the stomach emptying itself after eating

Other, longer-term complications can include weight loss, trouble digesting some foods, changes in bowel habits, and diabetes in some people.

Call during office hours if:

- You have questions about the procedure or its results.
- You want to make another appointment.