

Improved treatments target pancreas disorders

By Douglas A. Howell, MD

The pancreas is a particularly demanding organ to diagnose and treat, and pancreatic disorders have become a major area of research and expertise at Portland Gastroenterology Center.

Formerly the approach to such disorders was surgical, but increasingly, non-surgical interventions using endoscopy have proven to have many advantages.

Endoscopic sphincterotomy of the bile duct and pancreatic valves (also called sphincters) can prevent pancreatitis or reduce its severity. The patient also benefits from a shorter recovery time and less post-procedural discomfort than after surgery.

The basic procedure is called Endoscopic Retrograde Cholangiopancreatography. ERCP involves placing the patient under anesthesia for 30 to 90 minutes while a special side-viewing endoscope is introduced through the mouth and negotiated through the upper digestive track to a tiny structure through which important digestive juices flow. This small opening named the ampulla of Vater, is a Y-like valve where the bile duct and pancreatic ducts join and normally exit through a single opening into the small intestine.

Access by endoscopy through this structure was first performed in the late 1960s. In 1973 the first procedure to remove a gallstone from the bile duct was performed. Endoscopic sphincterotomy has almost completely replaced the need for open surgical exploration of the bile duct.

A principal problem with endoscopic interventions at the level of the ampulla of Vater has been potential for complications. Equipment development and new techniques have progressively reduced the risk of these complications at specialized centers with high expertise – and the physicians at Portland Gastroenterology Center have reduced procedural risks there to one of the lowest reported worldwide.



Douglas A. Howell, MD of Portland Gastroenterology Center. (Photo by Jim Daniels.)

Pancreatitis may follow passage of gallstones; be a complication of medications; be induced by ingestion of excessive alcohol, and, on occasion, be due to excessively high blood fats. A significant number of patients may develop pancreatitis for unknown reasons.

As a result, Portland Gastroenterology Center has been recognized in Maine, nationally and internationally as a Center of Excellence for the diagnosis and treatment of these disorders. The responsibilities of the practice include research and development, and teaching at the highest level of fellowship training. Many new

devices and techniques have been produced and are now in widespread use.

Among these are new treatments for large common bile duct stones, which because of high prevalence of gallstone disease are not uncommon. Patients can now be treated with special techniques of stone crushing, including mechanical lithotripsy, and electrohydraulic and laser lithotripsy, to avoid complex surgical procedures.

Procedures with surgery can often be customized to meet the needs of patients who have undergone previous obesity surgery or other anatomy-altering surgical procedures.

Innovations in endoscopic techniques include placement of stents, drainage of fluid collections and/or removal of obstructing pancreatic stones. All are frequently performed by our highly trained specialists.

ERCP can also be an important tool in the diagnosis and management of pancreatic cancer. Refinements in biopsy techniques and analyses are improving our ability to make diagnoses more quickly and accurately. In addition, the use of plastic and metal stents can be critical to longer survival in patients with pancreatic cancer.

In keeping with our commitment to optimize patient outcomes, we coordinate many pancreaticobiliary treatments through a multi-disciplinary effort, utilizing many other identified specialists from the fields of surgery, radiology, pathology and anesthesia, all cooperating with our specialty-trained physicians.

It is reassuring to know that at Portland Gastroenterology Center, endoscopic treatment is now available, at the highest level of expertise and safety, for nearly all complications of pancreaticobiliary diseases.

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