Less invasive techniques help manage complications of severe pancreatic disease

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The use of combined treatments for severe acute pancreatitis is safe and effective in managing the disease, resulting in shorter hospitalizations and fewer radiological procedures than standard therapy, according to a study in *Clinical Gastroenterology and Hepatology*, the official journal of the American Gastroenterological Association (AGA) Institute. In a related study, doctors found that patients with infected pancreatic necrosis were able to avoid surgery through primary conservative treatment, which is in-patient medical treatment.

Pancreatitis refers to the inflammation of the pancreas that usually begins as a sudden attack and is often caused by gallstones or alcohol abuse. Severe acute pancreatitis is the initial stage of pancreatitis, characterized by gradual or sudden severe pain in the center part of the abdomen that moves around to the back, signaling a damaged or severely irritated pancreas. Some people have more than one attack and recover completely after each episode, yet 20 percent of patients with acute pancreatitis have a severe, life-threatening illness with multiple complications, including walled-off pancreatic necrosis (WOPN). WOPN can become infected, obstruct or create passages to adjacent organs, erode into or compress blood vessels, and significantly delay a patient's functional improvement. When WOPN becomes infected or obstructs nearby organs, drainage and surgery generally has been advocated. However, less invasive techniques have evolved over the past 15 years that show equivalent effectiveness and fewer complications than surgery.

Doctors at Virginia Mason Medical Center compared the established treatment for WOPN (standard percutaneous drainage, which uses a thin needle to drain the infected fluid) with combined modality therapy (endoscopic transenteric [through the intestine] stents added to a regimen of percutaneous [under the skin] drains). Symptomatic patients with WOPN between January 2006 and August 2009 were treated with standard percutaneous drainage or combined modality therapy and compared by disease severity, length of hospitalization, duration of drainage, complications, and number of radiological and endoscopic procedures.

Patients undergoing combined modality therapy had significantly decreased length of hospitalization, duration of external drainage and number of computed tomography scans. Patients in the standard percutaneous drainage group had more complications.

"Patients with walled-off pancreatic necrosis require long hospitalization, utilize substantial amounts of health-care resources and are exposed to large quantities of ionizing radiation," said Michael Gluck, MD, of the Digestive Disease Institute, Virginia Mason Medical Center, and lead author of the study. "Until a large, multi-center, randomized trial is conducted, this current study adds another seemingly effective and safe management technique for symptomatic walled-off pancreatic necrosis with the added benefit of reducing length of hospitalization and use of radiological resources."

A life-threatening complication of acute pancreatitis is infected pancreatic necrosis (dead pancreatic tissue), which accounts for the majority of deaths in patients with acute pancreatitis. According to various practice guidelines, the standard of care for necrotizing pancreatitis is surgery. In a second study, doctors compared the outcomes of surgical treatment versus primary conservative treatment, in which patients are kept in intensive care and treated with antibiotics,

organ support, intensive nutritional support and, if required, percutaneous drainage.

"Until now, there has not been a trial comparing conservative and surgical therapy in patients with infected pancreatitis necrosis because conservative management was never considered a viable treatment option," said Pramod Kumar Garg, MD, DM, of the All India Institute of Medical Sciences, New Delhi, and lead author of this study. "We were able to demonstrate that throughout the course of 10 years, those who received primary conservative treatment had significantly higher survival rates than those who underwent surgery."

A group of 28 patients with infected pancreatitis necrosis were treated with surgery, while 52 patients in a second group were given primary conservative treatment. A primary conservative strategy resulted in mortality that was comparable with that following surgery. In addition, 76 percent of the patients were able to avoid surgery, and 54.5 percent were successfully managed with the primary conservative strategy.

More information: For more information on pancreatitis, please read the AGA brochure "Understanding Pancreatitis" at www.gastro.org/patient-center/ … ditions/pancreatitis

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