

Surgical quality program is a strong tool for assessing outcomes for high-risk procedures

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New research published in the December issue of the *Journal of the American College of Surgeons* finds that the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP) is a powerful tool for assessing outcomes of uncommon, high-risk surgical procedures, including pancreatic necrosectomy. This is the first time that national data on this particular procedure has been available and analyzed, and the data from ACS NSQIP showed that patients undergoing pancreatic necrosectomy had better outcomes than predicted.

Necrotizing pancreatitis is the most severe form of acute pancreatitis, an infection or [inflammation](#) of the pancreas. The surgical management of patients with pancreatic [necrosis](#) has evolved over the last 20 years due to improved medical management and delayed [surgical intervention](#), which has contributed to the reduced mortality rates in severe pancreatitis. However, most published literature comes from single-institution studies with relatively small numbers of patients, and no North American data previously existed regarding the outcomes of patients undergoing pancreatic necrosectomy (the removal of dead, or "necrosed," tissue in the [pancreas](#)).

ACS NSQIP is a nationally validated, outcomes-based, risk-adjusted, peer-controlled program for the measurement and enhancement of quality surgical care. In 2007, a new Current Procedural Terminology® (CPT) code for debridement of pancreatic and peripancreatic necrosis became available. The CPT® code set is used to describe medical,

surgical, and diagnostic services in order to communicate uniform information about medical services and procedures among physicians, coders, patients, accreditation organizations, and payers for administrative, financial and analytical purposes.

"Within 12 months, ACS NSQIP accumulated extensive data on 161 patients that had undergone pancreatic necrosectomy, a number that would take most hospitals decades to accumulate," said Henry A. Pitt, MD, FACS, professor and vice chairman of surgery, Indiana University School of Medicine, Indianapolis. "This study demonstrates that ACS NSQIP is a powerful data repository that provides hospitals with a practical tool to assess how well they are doing with uncommon, high-risk operations."

Using the new procedure code, the ACS NSQIP Participant Use File database was queried for all patients who had debridement of pancreatic and peripancreatic necrosis from January 1 - December 31, 2007. Preoperative, intraoperative and postoperative data variables are submitted on each patient, including the CPT® codes. Patient demographics, observed (O) and expected (E) morbidity and mortality, and indices (O/E) were evaluated. A multivariate stepwise logistic regression was performed to determine predictors of mortality.

Survivors and nonsurvivors were compared with respect to patient demographics, comorbidities, and postoperative outcomes. On average, non-survivors were 17 years older and had a significantly higher body mass index (35.6kg/m²) versus survivors (29.8kg/m², p

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