RESEARCH HIGHLIGHTS

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GLOSSARY ENDOSCOPIC RETROGRADE CHOLANGIO-PANCREATOGRAPHY (ERCP)

Endoscopic technique of injecting contrast dye into the ampulla of Vater for radiologic visualization of the pancreatic and biliary ducts

Superior control of nocturnal gastric-acid secretion by the novel proton-pump inhibitor, tenatoprazole

Proton-pump inhibitors (PPIs) effectively prevent gastric-acid secretion and are used to control the symptoms of various acid-related gastrointestinal diseases. These compounds have a short plasma half-life, however, which limits the efficacy of a single dose. The novel PPI tenatoprazole, an imidazopyridine derivative, benefits from an extended plasma half-life and could negate the requirement for repeated dosing. Galmiche *et al.* have recently compared the effects of tenatoprazole with esomeprazole, a benzimidazole-derived PPI, on intragastric pH in healthy subjects.

The randomized, two-period crossover study recruited 24 healthy, male volunteers from a French academic institution. All subjects had no history of gastrointestinal disease and tested negative for Helicobacter pylori, HIV, and hepatitis B and C. Volunteers received either 40 mg tenatoprazole (T40) or esomeprazole 40 mg (E40) once daily for 2 consecutive days and, after a 2week interim period, changed to the other regimen. All volunteers were hospitalized and intragastric pH was monitored every 5s during the 48-hour dosing period. Nocturnal pH levels were significantly higher on both the first and second days in subjects receiving T40 when compared with those receiving E40, although this effect was not observed diurnally. T40 was also significantly more effective than E40 at reducing the duration of nocturnal acid breakthroughs. The time needed to reach a sustained increase in intragastric pH was, however, comparable for both drugs. The authors conclude that tenatoprazole is a potent acid suppressor and, in the first 48h, exerts significantly better control over nocturnal intragastric pH than esomeprazole.

Original article Galmiche JP *et al.* (2005) A comparative study of the early effects of tenatoprazole 40 mg and esomeprazole 40 mg on intragastric pH in healthy volunteers. *Aliment Pharmacol Ther* **21:** 575–582

New guidelines on endoscopic diagnosis and management of pancreatic cystic masses

Based on expert opinion and analysis of existing data, the American Society for

Gastrointestinal Endoscopy has published guidelines on the use of endoscopic ultrasonography (EUS) and ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY (ERCP) in the diagnosis and treatment of pancreatic cystic lesions and fluid collections. Cystic pancreatic lesions encompass a number of benign and malignant masses. Pancreatic fluid collections (PFCs) develop secondary to pancreatitis and pancreatic trauma and typically resolve without intervention.

The guidelines state that although EUS is not a reliable basis for treatment decision making, it can help to differentiate between types of pancreatic cystic lesions and to guide fineneedle aspiration of lesions. Levels of enzymes and tumor markers in pancreatic cysts are not specific enough to identify malignancy or to distinguish a particular type of lesion; however, cytologic analysis of cyst fluid can aid diagnosis of pseudocysts, malignancy, and mucinous or serous cystadenomas. ERCP can also reveal signs characteristic of malignancy.

Although endoscopy is not used to treat neoplastic cystic lesions, the guidelines advocate endoscopic drainage as an alternative to surgical or percutaneous drainage of inflammatory PFCs. EUS or ERCP evaluation is suggested before drainage.

Further prospective controlled trials are warranted to clarify the exact role of EUS and ERCP in the diagnosis and management of pancreatic cystic lesions and PFCs. In the meantime, however, the new guidelines recommend that, with appropriate antibiotic prophylaxis, these techniques have utility in this setting.

Original article Jacobson BC *et al.*; American Society for Gastrointestinal Endoscopy (2005) ASGE guideline: the role of endoscopy in the diagnosis and the management of cystic lesions and inflammatory fluid collections of the pancreas. *Gastrointest Endosc* **61**: 363–370

Does high-dose allopurinol prevent post-ERCP pancreatitis?

Allopurinol inhibits the generation of oxygenderived free radicals and it has been postulated that this xanthine oxidase inhibitor might prevent post-endoscopic retrograde cholangiopancreatography (ERCP) pancreatitis. Despite