RESEARCH HIGHLIGHTS

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Antibiotics do not prevent infected pancreatic necrosis in ANP

Most patients who present with acute necrotizing pancreatitis (ANP) recover fully within around 1 week, but 20% develop complications that are fatal in 10–30% of cases. Prophylactic antibiotics are commonly used to prevent one major complication—infected pancreatic necrosis but results from trials designed to demonstrate the effectiveness of this therapy have produced conflicting results.

Bai *et al.* performed a meta-analysis to evaluate the evidence from randomized, controlled trials and to provide definitive information on the efficacy of antibiotic prophylaxis in ANP. Seven trials involving 467 ANP patients were identified in the MEDLINE and EMBASE databases, the Cochrane controlled trials register, the Cochrane Library, and the Science Citation Index. Data from these studies were analyzed to explore associations between infected pancreatic necrosis, antibiotic use and mortality.

The authors found that the rate at which patients with ANP developed infected pancreatic necrosis was not significantly different between those who were given prophylactic antibiotics and those who were not (17.8% versus 22.9%). Mortality was slightly lower in patients given antibiotics, but the difference between treated and untreated groups was not significant.

The authors conclude that giving patients with ANP prophylactic antibiotics to reduce the risk of infected pancreatic necrosis and to decrease mortality does not seem justified. They recommend, however, that this issue should be clarified in large, well-designed, randomized, placebo-controlled, double-blind trials.

Original article Bai Y *et al.* (2008) Prophylactic antibiotics cannot reduce infected pancreatic necrosis and mortality in acute necrotizing pancreatitis: evidence from a meta-analysis of randomized controlled trials. *Am J Gastroenterol* **103**: 104–110

Updated consensus on the management of GERD in Asia

Since the Asia-Pacific consensus report on managing GERD was published in 2004, global definitions of GERD and Barrett's esophagus have been reviewed and new imaging techniques have become available. An updated consensus was, therefore, considered timely, and a multidisciplinary group present the new set of statements that have now been developed.

Data relevant to each statement, the quality of supporting evidence and the level of consensus are all included. From the evidence considered, Fock *et al.* concluded that the prevalence of GERD in Asia is increasing. Older Asian men with a family history of GERD and high socioeconomic status, who also are more likely to be obese and smoke, are at particularly high risk.

Diagnosis of GERD can still be problematic. An improvement in response to PPI therapy should be considered diagnostic in patients who have only typical symptoms, and in those who additionally present with chronic cough and laryngitis but no alarm symptoms. In Asia, diagnostic algorithms must consider potentially coexistent gastric cancer and peptic ulcer. GERD can be excluded by a negative pH study following failure of a PPI trial. Although new imaging technologies hold much promise, their role in GERD diagnosis in Asia still remains to be defined.

With respect to treatment, the report recommends PPIs as the most effective medical treatment but suggests that weight loss and raising the height of the bed head are also useful. Endoscopic treatment of GERD should be limited to clinical trial populations.

Original article Fock KM *et al.* (2008) Asia-Pacific consensus on the management of gastroesophageal reflux disease: update. *J Gastroenterol Hepatol* **23**: 8–22

Probiotic supplementation affects hepatic lipid metabolism in a mouse model

The link between numerous diseases—including Crohn's disease and diabetes—and abnormalities in gut microflora suggests that gut microbial activity affects many metabolic pathways. Oral administration of probiotic bacteria seems to benefit the digestive system; however, comprehensive assessment of the effects of probiotic intervention is difficult in humans. Martin *et al.*, therefore, used a humanized microbiome mouse model to examine host metabolic responses to probiotic supplementation.

Mice whose gut had been colonized with human gut microbes received a basal-mix diet and either a saline drink or a probiotic supplement