GASTRO-HEP News

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Inflammatory Bowel Disease Associated With Increased Risk of Myocardial Infarction

Patients with inflammatory bowel disease (IBD), particularly women and patients between ages 20 to 25 years, have a significantly higher risk for myocardial infarction compared to the general population, according to the results of a study presented in abstract form on March 11, 2018 at the American College of Cardiology's 67th Annual Scientific Session in Orlando, Florida.

Dr Muhammad Panhwar and colleagues reviewed electronic medical record data aggregated from 26 US health care systems (Explorys, IBM Watson). Patients aged 18 to 65 years who were diagnosed with ulcerative colitis or Crohn's disease and who had active records between September 2014 and September 2017 were identified in the review. The researchers then assessed the risk of myocardial infarction in patients with and without IBD.

Of the 17,538,190 patients in the database, 211,870 (1.2%) had IBD. Compared to patients without IBD, patients with ulcerative colitis or Crohn's disease were more likely to have hypertension (21.9% vs 33.6%; *P*<.001), dyslipidemia (18.3% vs 27.8%; *P*<.001), and diabetes (8.9% vs 15.9%; *P*<.001). Additionally, patients with IBD were more likely to smoke than patients without IBD (20.7% vs 12.0%; *P*<.001). The risk of myocardial infarction was almost twice as high in patients with IBD (3.9% vs 1.65%; *P*<.001; relative risk [RR], 2.4). Younger patients (age 20-25 years) had the highest risk of myocardial infarction (RR, 20.5; *P*<.001); this risk decreased with age (60-64 years: RR, 1.81; *P*<.001). Women typically experience more frequent IBD flares and increased inflammation, which may explain the higher risk for myocardial infarction in women with IBD. Other chronic inflammatory diseases (eg, rheumatoid arthritis, systemic lupus erythematosus) are also associated with increased risk for cardiovascular disease.

The researchers recommended that clinicians should consider IBD as a risk factor for heart disease, and should screen and treat cardiovascular risk factors aggressively.

Fibroblast Growth Factor 19 Analog Reduces Liver Fat Content in Patients With Nonalcoholic Steatohepatitis

NGM282, an engineered fibroblast growth factor 19 analog, reduced liver fat rapidly, significantly, and safely in patients with nonalcoholic steatohepatitis (NASH), according to results of an industry-supported study published online on March 5, 2018 ahead of print publication in *The Lancet*. Currently, no treatment is approved by the US Food and Drug Administration for NASH.

For the multicenter, randomized, double-blind, placebo-controlled, phase 2 study, Dr Stephen A. Harrison and colleagues recruited patients across 18 sites in Australia and the United States who were between the ages of 18 to 75 years and who had biopsy-confirmed NASH as outlined by the NASH Clinical Research Network histologic scoring system. Eligibility criteria included a nonalcoholic fatty liver disease activity score of at least 4, fibrosis stage of 1 to 3, and liver fat content of 8% or higher. The primary endpoint was a change in liver fat content from baseline to week 12.

Of the 166 patients screened between July 14, 2015 and August 30, 2016, 82 patients were included in the study. Patients were randomized to receive either 3 or 6 mg of subcutaneous NGM282 or placebo. At 12 weeks, 74% (20/27) and 79% (22/28) of patients receiving 3- and 6-mg doses of NGM282, respectively, achieved a 5% or larger reduction in absolute liver fat content from baseline (3-mg dose: RR, 10.0; 95% CI, 2.6-38.7; *P*<.001; 6-mg dose: RR, 11.4; 95% CI, 3.0-43.8; *P*<.001) than patients in the placebo group (7%; 2/27). The majority of patients (93%) experienced at least 1 adverse event; only 6% were serious. The most common adverse events were injection site reactions (34%), diarrhea (33%), abdominal pain (18%), and nausea (17%) and were reported more frequently in the NGM282 groups. No deaths or life-threatening events occurred during the study.

In Brief

A pediatric appendicitis risk calculator (pARC) accurately quantified the risk for appendicitis in children with acute abdominal pain. In a validation sample of 1426 children, the risk calculator demonstrated calibration and a high degree of discrimination (area under the curve: 0.85; 95% CI, 0.83-0.87) that outperformed the Pediatric Appendicitis Score (area under the curve: 0.77; 95% CI, 0.75-0.80). *Pediatrics*. 2018 March 13. Epub ahead of print. doi:10.1542/peds.2017-2699.