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IN BRIEF

COLORECTAL CANCER

Eicosapentaenoic acid has anticolorectal cancer activity

Cockbain *et al.* studied the effect of the free fatty acid form of eicosapentaenoic acid (EPA-FFA) in patients undergoing liver resection surgery for CRC liver metastases. EPA-FFA was safe and well tolerated; it had no effect on the Ki67 proliferation index, but vascularity was reduced in EPA-naive patients and EPA-FFA had antiangiogenic activity *in vitro*. Early CRC recurrence rates were similar to those in the placebo group, but overall survival was improved in the 18 months after resection in patients who received EPA-FFA before surgery.

Original article Cockbain, A. J. *et al.* Anticolorectal cancer activity of the omega-3 polyunsaturated fatty acid eicosapentaenoic acid. *Gut* doi:10.1136/gutjnl-2013-306445

IBD

SMAD3 and risk of recurrent surgery for Crohn's disease

Fowler *et al.* used the Prospective Registry in IBD Study at Massachusetts General Hospital (PRISM) to identify patients who had undergone ≥ 1 bowel resections related to their Crohn's disease. The risk of repeat surgery was increased in those with stricturing or penetrating disease and decreased for those who had stopped smoking. No association between *NOD2* and increased risk of repeat surgery was reported; however, the risk of repeat surgery was increased, and the time to repeat surgery shortened, for patients with *SMAD3* homozygosity for the risk allele.

Original article Fowler, S. A. *et al.* *SMAD3* gene variant is a risk factor for recurrent surgery in patients with Crohn's disease. *J. Crohns Colitis* doi:10.1016/j.crohns.2014.01.003

INFECTION

Rotavirus vaccination and risk of intussusception

Two papers in the *New England Journal of Medicine* have looked at the intussusception risk in US infants after rotavirus vaccination. Weintraub *et al.* report an estimated attributable risk of intussusception after two doses of monovalent vaccine of 5.3 per 100,000 infants vaccinated. Yih *et al.* reported that the first dose of pentavalent vaccine was associated with 1.5 excess cases of intussusception per 100,000 infants vaccinated. Secondary analysis suggested a potential risk with monovalent vaccine, but this part of the study was underpowered. Both groups stress the need to view the risk in light of the benefits of vaccination.

Original articles Weintraub, E. S. *et al.* Risk of intussusception after monovalent rotavirus vaccination. *N. Engl. J. Med.* doi:10.1056/NEJMoa1311738 | Yih, W. K. *et al.* Intussusception risk after rotavirus vaccination in U.S. infants. *N. Engl. J. Med.* doi:10.1056/NEJMoa1303164

MICROBIOTA

Antibiotics shift mouse gut microbiome and metabolome

Theriot *et al.* have shown that the mouse gut microbiome and metabolome undergo substantial changes in response to antibiotic treatment and that these changes support the germination and growth of *Clostridium difficile*. Treatment with cefoperazone altered the composition and diversity of the gut microbiome and enriched the metabolic environment with primary bile acids and carbohydrates.

Original article Theriot, C. M. *et al.* Antibiotic-induced shifts in the mouse gut microbiome and metabolome increase susceptibility to *Clostridium difficile* infection. *Nat. Commun.* doi:10.1038/ncomms4114