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IN BRIEF

ULCERATIVE COLITIS

Administering infliximab after ciclosporin

A retrospective review suggests that infliximab salvage therapy can avoid colectomy in two-thirds of patients with corticosteroid-refractory ulcerative colitis who experience ciclosporin failure. 13% of 47 patients whose records were reviewed achieved remission after the first infliximab infusion; 60% of 35 patients who received a third infliximab infusion achieved remission. However, the authors stress the need to consider such sequential therapy on a case-by-case basis owing to the rates of adverse events and mortality.

Original article Chaparro, M. *et al.* Infliximab salvage therapy after failure of ciclosporin in corticosteroid-refractory ulcerative colitis: a multicentre study. *Aliment. Pharmacol. Ther.* **35**, 275–283 (2012)

HEPATITIS E

Global health burden of hepatitis E virus infection estimated

The 2005 annual disease burden of HEV genotype 1 and 2 infection has been estimated for 71% of the world's population (9 of 21 regions defined for the GBD 2010 study). Estimates include 20.1 million incident HEV infections, 3.3 million symptomatic cases, 70,000 deaths and 3,000 stillbirths. The probability of symptomatic disease if infected is estimated at 0.198, whereas the probability of death given symptomatic disease is estimated at 0.019 for nonpregnant cases and 0.198 for pregnant cases.

Original article Rein, D. B. *et al.* The global burden of hepatitis E virus. *Hepatology* doi:10.1002/hep.25505

CELIAC DISEASE

Role for microbiota-associated factors in celiac disease?

In this study, controls, untreated and treated celiacs had comparable small intestinal microbiota, but IL-8 messenger RNA expression was significantly higher in untreated celiacs than in treated celiacs or controls. Compared with controls, untreated and treated celiacs had significantly decreased TLR2 mRNA expression, and untreated celiacs had higher TLR9 mRNA expression and lower TOLLIP mRNA expression. As Toll-like receptors, and their regulators, are key to microbiota recognition, the authors suggest they may be important for disease development.

Original article Kalliomäki, M. *et al.* Expression of microbiota, toll-like receptors and their regulators in the small intestinal mucosa in celiac disease. *J. Pediatr. Gastroenterol. Nutr.* doi:10.1097/MPG.0b013e318241cfa8

GUT MICROBIOTA

Gut microbiota regulates host gene expression along the length of the gut

By comparing transcriptional profiles of the duodenum, jejunum, ileum and colon in germ-free and conventionally raised wild-type and *Myd88*^{-/-} mice, Larsson *et al.* have shown that expression of a large set of genes in the small intestine (but fewer genes in the colon) is modulated by the gut microbiota. MyD88 (through which Toll-like receptors signal) was not required by many microbiota-regulated genes, but gut microbial ecology was altered in the absence of MyD88.

Original article Larsson, E. *et al.* Analysis of gut microbial regulation of host gene expression along the length of the gut and regulation of gut microbial ecology through MyD88. *Gut* doi:10.1136/gutjnl-2011-301104