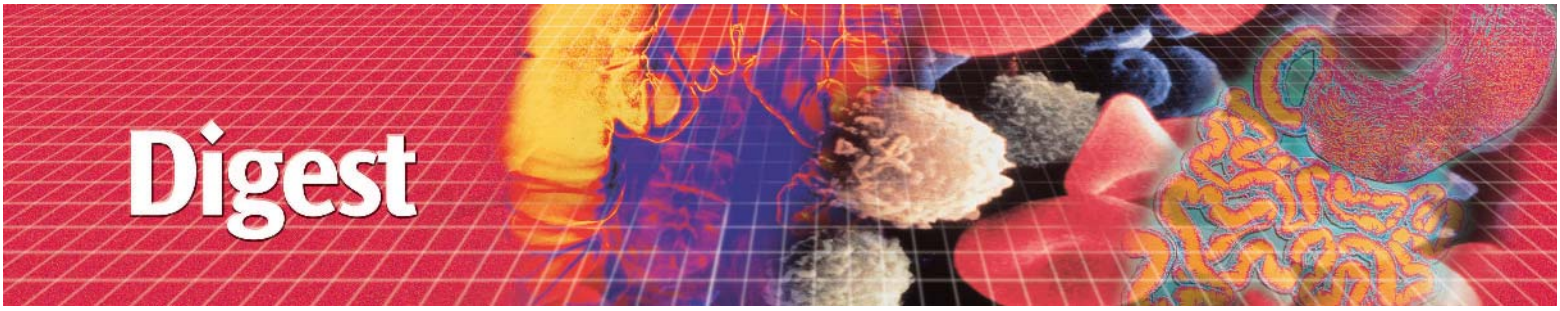

Robin Spiller, *Editor*

Bloating is associated with impaired response to rectal distension

Bloating is a troublesome and, until recently, mysterious complaint. Over the past few years the Barcelona group have demonstrated that although normal individuals can rapidly expel infused gas, IBS patients with bloating show impairment of this response. The present study shows that simulating feeding in normal subjects by infusing fat in the duodenum impairs gas expulsion while rectal distension has the opposite effect. However, when similar studies are performed in bloated subjects the effect of duodenal fat infusion was enhanced while rectal distension failed to accelerate gas expulsion. Thus, these patients appear to have both increased sensitivity to the effects of feeding and impaired response to the pro-kinetic effect of rectal distension. Further studies are needed to define the pharmacology of this pro-kinetic effect with the possibility of developing a new treatment for such patients.

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Childhood antecedents of IBD: no support for the hygiene hypothesis

In spite of the recent focus on genetic factors in Crohn's disease, the recent rapid rise in incidence strongly suggests an important environmental factor. Urbanisation, decreasing family size, and increasing childhood hygiene have been implicated by association (the so called "hygiene hypothesis"). The current study is a population based, matched case-control study from the French Registry of IBD, which has been running in Northern France since 1988. It covers a paediatric population of 1.3 million, with 282 IBD cases. The authors collected information on the family history of IBD, peri-natal disorders, childhood infections, vaccinations and evidence concerning home hygiene in paediatric patients with IBD. The study confirms the known importance of a family history of IBD for both Crohn's and ulcerative colitis and the strong protective effect of appendicectomy on ulcerative colitis. However, it gave no support for the hygiene hypothesis. In particular, those who did not have access to piped drinking water and those who shared a bedroom seemed to have an increased incidence of IBD, reverse to what would be expected. Furthermore, contrary to previous studies Crohn's disease children appeared to be less often subject to the MMR vaccination. Administration of BCG was a significant risk factor showing a dose response with the odds ratio of 2.6 for one vaccination increasing to 3.6 for the second. The authors argue that this could be because BCG prompts a Th1 immune response. The authors conclude by stressing the importance of repeating these findings in other populations and avoiding any premature conclusions or changes in child rearing practice, something that the UK experience suggests is wise advice.

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Increased risk of hepatitis C reactivation in patients infected with genotype 2c

Gastroenterologists dealing with the current epidemic of hepatitis C infection need markers to identify which patients need surveillance and treatment if they are to avoid progression to serious liver disease. Most of the risk factors currently recognised, namely older age at the time of infection, male sex, alcohol misuse, and immunosuppressant, are host rather than virological factors. The study from Milan surveyed a cohort of 100 patients with genotype 2c hepatitis and 106 with genotype 1b, a group that contains very few intravenous drug addicts in Italy who, at least, are mainly 1a and 3a. They detected flares in the disease as measured by a rise in ALT (>8 fold rise or ALT >400 IU/L) at a rate of 56 per thousand person years with genotype 2c compared with just 15 per thousand person years for genotype 1b. These flares appeared independent of age, sex, or histological activity at the time of biopsy. The authors draw attention to this pattern of intermittent rise in ALT, which they found commoner in patients over the age of 45. The risk of flare did not relate to the consumption of alcohol or drugs, but did relate to the genotype. One possible explanation for this is that genotype 2c shows more variability in the epitopes involved in the host immune response and hence episodically evades immune control. They also suggest that these episodic flares are important in causing deterioration in the histology, which so far has been thought of as a progressive, linear process.

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Blood tests for predicting oesophageal varices in PBC?

Implementing primary prevention of variceal haemorrhage in patients with primary biliary cirrhosis (PBC) requires the early detection of varices before they bleed. Because many patients with PBC are detected in the pre-symptomatic phase and followed for many years before developing any complication a simple blood test to indicate who would be at risk from haemorrhage and hence a suitable candidate for beta blocker therapy would be of great value. Previous guidelines have suggested that a platelet count less than 140 000 or an enlarged portal vein is an indication for endoscopic screening for varices in patients with Child class A cirrhosis. The group from Toronto have re-evaluated the value of a range of blood tests using multiple logistic regression. They find that platelets less than 200 000 /mm^3, albumin less than 40 g/l, and bilirubin greater that 20 µmol/l were independent risk factors. Patients meeting all three of these criteria had a 68% chance of having varices at endoscopy, while those not meeting any of these criteria has a risk of just 5.6%. By saving inappropriate endoscopies, these simple screening guidelines are likely to save money while at the same time detecting most patients likely to benefit from beta blocker therapy.

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