

with the development of advanced fibrosis within 2 years of transplant, and this association was independent of the degree of fibrosis, histologic activity index score and alanine aminotransferase levels. The authors also conclude that assessment of HSC activity might be a useful predictor of subsequent fibrosis, and suggest that it might complement traditional tests such as histologic assessment of fibrosis, and histologic activity index, for the identification of those patients in greatest need of antiviral treatment.

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**Original articles** Gawrieh S *et al.* (2005) Early hepatic stellate cell activation predicts severe hepatitis C recurrence after liver transplantation. *Liver Transpl* **11**: 1207–1213  
Russo MW *et al.* (2005) Early hepatic stellate cell activation is associated with advanced fibrosis after liver transplantation in recipients with hepatitis C. *Liver Transpl* **11**: 1235–1241

## Patients with IBD are at increased risk of other chronic inflammatory diseases

Evidence is emerging that patients with one immune-mediated disease are at increased risk for other immune-mediated diseases compared with the general population. Results from a genome scan study suggested that chronic immune diseases can show clustering in certain patients, suggesting a genetic susceptibility for these diseases. Whether inflammatory disease arises as a result of genetic factors, shared causative triggers or as a consequence of other diseases or their treatment, however, is unknown. Determining associations between inflammatory disorders could help to identify common genetic or environmental factors that might contribute to the underlying causes of these diseases.

Patients with inflammatory bowel disease (IBD) are known to have an increased incidence of several immune-mediated conditions, including extraintestinal manifestations such as arthritis, ankylosing spondylitis, erythema nodosum and inflammatory ocular disorders. Data on the associations between IBD and a range of inflammatory diseases in systems other than the bowel have come from the results of two new studies.

In a large, Canadian population-based study ( $n=8,072$ ), Bernstein and colleagues found a significantly greater likelihood of several inflammatory diseases in patients with ulcerative colitis or Crohn's disease. Both ulcerative colitis

and Crohn's disease patients had an increased risk of arthritis, asthma, bronchitis, psoriasis and pericarditis, relative to population-matched controls. For patients with ulcerative colitis there was an additional risk of chronic renal disease and multiple sclerosis (MS). Overall, the most common coexisting inflammatory disorders in patients with IBD were arthritis (a known extraintestinal manifestation of IBD) and asthma. Although a variety of pulmonary problems have been reported in patients with IBD, this is the first time that associations with asthma and bronchitis have been confirmed. The authors recommend that, given this link, respiratory problems in patients with IBD should be properly investigated. Chronic inflammatory diseases were diagnosed before IBD in 63% of patients. The authors suggest that findings of an increased risk for IBD in patients with other inflammatory disorders might support a common-cause hypothesis.

A possible link between IBD and MS has long been postulated, and has become of more interest recently, following warnings that anti-tumor-necrosis-factor- $\alpha$  therapies used to treat IBD might trigger the onset of demyelinating diseases. Gupta and colleagues performed a retrospective cohort study and a cross-sectional study using 1988–1997 data from the UK General Practice Research Database, involving 7,988 Crohn's disease patients, 12,185 ulcerative colitis patients and 80,666 matched controls. The retrospective cohort study identified an increased incidence of MS, demyelination and optical neuritis in patients with Crohn's disease and ulcerative colitis relative to matched controls. Interestingly, this only reached significance in patients with ulcerative colitis, which supports the findings of the Bernstein study. A similar link for Crohn's disease and ulcerative colitis with MS, demyelination and optical neuritis was seen in the cross-sectional analysis. As these data show an association between IBD and demyelinating diseases in patients before the use of anti-tumor-necrosis-factor- $\alpha$  therapies, the authors suggest further studies into the links between these therapies and onset of demyelination in patients with IBD.

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**Original articles** Bernstein C N *et al.* (2005) The clustering of other chronic inflammatory diseases in inflammatory bowel disease: a population-based study. *Gastroenterology* **129**: 827–836  
Gupta G *et al.* (2005) Increased risk for demyelinating diseases in patients with inflammatory bowel disease. *Gastroenterology* **129**: 819–826