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HPV16. Integration of the viral DNA into the host-cell genome is likely to be important in the pathogenesis of the disease.

**Original article** Bodaghi S *et al.* (2005) Colorectal papillomavirus infection in patients with colorectal cancer. *Clin Cancer Res* **11**: 2862–2867

## Diagnosis of primary biliary cirrhosis and autoimmune cholangitis

Most patients with primary biliary cirrhosis produce antimitochondrial antibodies (AMA), which are detected using immunofluorescence techniques. Some patients with the clinical and histopathologic features of this disorder are AMA negative, however, and produce antinuclear antibodies (ANA). The term 'autoimmune cholangitis/cholangiopathy' has been used to describe these cases, but it not clear whether they actually represent a separate disease entity. To explore this question, researchers from Japan have analyzed the AMA and ANA profiles of patients with either disorder.

This prospective study included 23 patients diagnosed with primary biliary cirrhosis and a further 9 patients with autoimmune cholangitis/cholangiopathy. AMA and ANA were measured in two or more serially stocked sera from each patient. Follow-up was for at least 20 months.

When antibody status was determined using immunofluorescence analysis alone, the profiles of AMA or ANA changed in seven patients (22%) during follow-up. Accordingly, the diagnosis changed from primary biliary cirrhosis to autoimmune cholangitis/cholangiopathy (or vice versa) in these patients. This was the case in only three patients (9%) when enzyme-linked immunosorbent assay results were taken into account, and in only one patient when immunoblotting analysis was also used.

Kadokawa et al. conclude that the diagnosis of primary biliary cirrhosis or autoimmune cholangitis/cholangiopathy might be affected by the 'phase' of the disease. In addition, they propose that it might be appropriate to use immunoblotting analysis before excluding the diagnosis of primary biliary cirrhosis.

**Original article** Kadokawa Y *et al.* (2005) Does the diagnosis of primary biliary cirrhosis or autoimmune cholangitis depend on the 'phase' of the disease? *Liver Int* **25**: 317–324

## Predicting mortality in children with Wilson's disease

A team from King's College Hospital in the UK have recently reported on their 37-year experience of treating children with Wilson's disease, and have proposed a new method for predicting mortality in these patients. This rare disorder of copper metabolism can often be treated successfully with chelating agents, but liver transplantation is sometimes necessary. It is important, therefore, to assess the likelihood of survival without transplantation.

Dhawan et al. first described their set of prognostic criteria for predicting death without transplantation in 1986. This retrospective review of 74 cases of Wilson's disease showed that the original scoring system—based on bilirubin, aspartate aminotransferase and INR—had a sensitivity of 87% and a specificity of 90%. The team then refined the system, adding albumin and white cell count to the list of criteria. The new Wilson Index identified a cut-off score of 11 for death without transplantation. Using the revised parameters, sensitivity and specificity were improved to 93% and 98%, respectively.

Next, the investigators tested the new index prospectively in a further 14 patients. All four children in whom transplantation was indicated had a Wilson Index score of at least 11, although one child had a score of 11 and did not require a transplant. All of the children who responded to medical treatment had a score of 6 or lower.

In conclusion, the new Wilson Index appears to be superior to the previous scoring system in predicting mortality in children with Wilson's disease. A larger group of patients is now needed to validate these findings.

**Original article** Dhawan A *et al.* (2005) Wilson's disease in children: 37-year experience and revised King's score for liver transplantation. *Liver Transpl* 11: 441–448

## EUS-guided trucut biopsy in the diagnosis of autoimmune pancreatitis

A preliminary study by Levy and colleagues has shown that endoscopic ultrasound-guided trucut biopsy (EUS TCB) might be sufficient to establish the diagnosis of autoimmune pancreatitis. If validated in prospective studies,