

GLOSSARY**ROC CURVE**

Receiver operating characteristic: a statistical validation tool used to measure how well logistic regression models have predicted a particular binary outcome. The area under the curve (AUC) equates to the probability of being able to discriminate between the two possible outcomes, with the ideal value being 1.0

the analysis was restricted to smaller (6–9 mm) lesions. Colonoscopy also appeared to be superior to ACBE or CTC in terms of specificity.

Concluding that colonoscopy was more sensitive than ACBE or CTC in this study, the authors discuss the influence of factors such as reader experience and software techniques for CTC. They also note that CTC is likely to provide better results as the technique undergoes further development.

Original article Rockey DC *et al.* (2005) Analysis of air contrast barium enema, computed tomographic colonography, and colonoscopy: prospective comparison. *Lancet* 365: 305–311

Reducing esophageal acid exposure in infants

The problem of infant regurgitation is sometimes addressed using thickened formula feed, although the efficacy of this approach has not been clearly demonstrated. Xinias *et al.* have recently published the results of their study of a cornstarch-thickened formula.

The multicenter study included 96 formula-fed infants with episodes of regurgitation and vomiting (more than five times daily) and abnormally low esophageal pH at baseline. The mean age of the infants was 93 days. The patients were randomized to 28 days' feeding using either a standard infant formula ($n=45$) or a casein predominant formula thickened with a treated cornstarch ($n=51$). Parents recorded symptoms of regurgitation throughout the study period.

At the end of the study, infants who had been fed on the cornstarch-thickened formula showed significant improvements compared to baseline in terms of reflux index (defined as the percentage of the investigation time with an esophageal pH of <4.0) and the number and duration of reflux episodes. No such improvements were seen in the standard formula group.

The authors conclude that the cornstarch-thickened formula produced a significant decrease in esophageal acid exposure and so may be superior to other thickening agents, such as bean gum and rice starch. Furthermore, the results suggest that the thickened feed reduced both acid and nonacid reflux.

Original article Xinias I *et al.* (2005) Cornstarch thickened formula reduces oesophageal acid exposure time in infants. *Dig Liver Dis* 37: 23–27

Diagnosing cirrhosis in patients with hepatitis C

The diagnosis of cirrhosis is an important aspect of managing patients with chronic hepatitis C, not least because cirrhosis dramatically increases the risk of hepatocellular carcinoma. Although noninvasive diagnostic tests based on serum markers have been devised, some of these are affected by treatments for hepatic inflammation, and so a new diagnostic index for cirrhosis is needed.

Qiu and colleagues from the University of Tokyo collected sera from 140 consecutive patients with chronic hepatitis C. Along with routine blood tests, they measured levels of the fibrosis markers type IV collagen and pro-collagen type III peptide. A total of 11 clinical parameters were assessed in patients with or without biopsy-determined cirrhosis.

As anticipated, platelet count, prothrombin time and serum albumin were significantly lower in patients with cirrhosis than in those without. Levels of type IV collagen and pro-collagen type III peptide were significantly higher in patients with cirrhosis, whereas there was no association between the presence of cirrhosis and levels of aspartate aminotransferase, alanine aminotransferase or γ -glutamyl-transpeptidase.

The authors derived two diagnostic indices from these results, based on prothrombin time and platelet count ('index I') or prothrombin time and type IV collagen ('index II'). Since ROC CURVE analysis showed that index II was superior, the authors propose that this be used in routine clinical practice.

Original article Qiu Y *et al.* (2004) A simple combination of serum type IV collagen and prothrombin time to diagnose cirrhosis in patients with chronic active hepatitis C. *Hepatol Res* 30: 214–220

Parasite therapy for Crohn's disease

A recent paper by Summers *et al.* describes a potential new treatment for Crohn's disease, based on a whipworm isolated from pigs. Colonization of the gut with this helminthic parasite appeared to diminish the effects of Crohn's disease, possibly by downregulating the host immune response.