

multiple clinical scoring systems. Serum adipocytokine levels were measured daily for up to 10 days (fewer days in 6 patients, because of death or recovery).

Resistin levels on day of admission (and also mean resistin levels) predicted a Schröder score >3 (this degree of extrapancreatic necrosis defines severe acute pancreatitis). A cutoff of >6.95 ng/ml for admission resistin levels gave a positive predictive value of 93.3%. Resistin levels correlated with clinical scores, time until discharge, and need for intervention. Mean daily resistin and leptin levels were highest in patients with severe disease, and correlated with the degree of extrapancreatic necrosis. Mean leptin levels gave a positive predictive value of 88% in predicting a Schröder score >3 with a cutoff >15 ng/ml, but showed less sensitivity than resistin. Admission leptin levels did not predict severe acute pancreatitis, which the authors attribute to low patient numbers. Neither mean nor admission adiponectin levels predicted severe acute pancreatitis.

Further studies with larger patient groups could show whether these associations are robust enough to be used for patient management.

**Original article** Schäffler A *et al.* (2006) Potential of adipocytokines in predicting peripancreatic necrosis and severity in acute pancreatitis: pilot study. *Gastroenterology* doi:10.1111/j.1440-1746.2006.04364.x

## Promising results for multiple band ligation of prolapsed rectal mucosa

There is controversy over which treatment for mucosal prolapse of the anterior rectal wall provides the longest complete remission from symptoms. Kleinübing *et al.* have carried out a preliminary, single-center study into the use of multiple, longitudinally sited, rubber-band ligation. Their results indicate that this treatment could be a valuable alternative to standard care.

All treated patients had proctoscopy-confirmed mucosal prolapse, and had not responded to conservative treatment of their symptoms (bulk laxatives and advice on bowel habits). Double (7 patients) or triple (9 patients) rubber-band ligation was performed, depending on the extent of prolapsed mucosa. No sedation or antibiotics were required, although oral NSAIDs and paracetamol were prescribed.

Complete and persistent remission of symptoms was reported by 14 patients at telephone follow-up (median 12 months, range 9–15 months). Of the two symptomatic patients, one was successfully treated by repeat ligation. This procedure was unsuccessful in the other patient, who was subsequently diagnosed with complete internal rectal prolapse by defecography. This patient was the only participant to report procedure-related complications (persistent pain for 7 days post-treatment).

The authors graded pretreatment prolapse severity according to the Pescatori and Quonamcarlo scheme, but this failed to identify the patient with complete rectal prolapse. They recommend, therefore, that defecography should be performed before rubber-band ligation to identify patients who might benefit. Further studies with larger patient groups and longer follow-up, and which directly compare this treatment with standard care, are now needed.

**Original article** Kleinübing H Jr *et al.* (2006) Longitudinal multiple rubber band ligation: an alternative method to treat mucosal prolapse of the anterior rectal wall. *Dis Colon Rectum* 49: 876–878

## Antioxidants help relieve pain and improve quality of life for chronic pancreatitis patients

The severe pain that characterizes chronic pancreatitis is resistant to treatment with conventional analgesics. Patients often become dependent on opiate analgesics, or have to live with the considerable morbidity associated with pancreatic surgery. Recent research has indicated that chronic pancreatitis pain might be partly caused by increased free-radical activity, and that treatment with antioxidants might help relieve pain.

Researchers from the UK tested the effects of the combined antioxidant preparation Antox® (Pharma Nord ApS, Vejle, Denmark) on the pain and quality of life experienced by 36 patients with chronic pancreatitis. In a double-blind, crossover trial, patients were randomly allocated to receive either Antox® or placebo four times daily for 10 weeks, and were then switched to the other treatment for a further 10 weeks. Only 19 patients completed the whole study; however, the high dropout rate was not unexpected, given the length of the study and ongoing patient alcohol-dependency issues.