Luminal GI
Does preoperative biological therapy increase risk of postoperative complications in IBD patients?

Patients on biological therapy such as infliximab or adalimumab are at increased risk of infections and there is conflicting evidence that some IBD patients who had abdominal surgery with preoperative exposure to biologics do badly. In this issue of Gut, Waterman et al report postoperative outcomes in patients who underwent abdominal surgery with recent exposure to anti-tumour necrosis factor therapy. The authors conducted a retrospective case-control study with detailed matching for subjects with IBD with and without exposure to biologics within 180 days of abdominal surgery. Four hundred and seventy-three procedures were reviewed consisting of 195 patients with exposure to biologics and 278 matched controls. There were no significant differences in most postoperative outcomes such as: length of stay, fever (≥38.5°C), urinary tract infection, pneumonia, bacteraemia, readmission, reoperations and mortality. Concomitant therapy with biologics and thiopurines was associated with increased frequencies of urinary tract infections (p=0.0007) and wound infections (p=0.0045). Operations performed ≤14 days from last biologic dose had similar rates of infections and other outcomes when compared with those performed within 15–30 days or 31–180 days. The authors conclude that in most cases, surgery should not be delayed, and appropriate biological therapy may be continued perioperatively (see page 387).

With sessile serrated polyposis, the polyps just keep coming

Serrated (hyperplastic) polyposis syndrome (SPS) is an uncommon syndrome characterised by multiple colorectal hyperplastic polyps as well as sessile serrated adenomas/polyps (SSA/P) or adenomas. Although SPS is associated with an increased risk of colorectal cancer, the natural history of this syndrome has not been well described. Giardiello and colleagues provide some insight into SPS by reporting on their experience with a cohort of patients they have followed with surveillance colonoscopies and upper GI endoscopic exams. They found that these patients persistently had new adenomas on colonoscopic exams done annually and that some of the patients presented with cancer. Interestingly, they did not find polyps in the stomach or duodenum in any of the patients. Their findings suggest that these patients should get annual colonoscopic surveillance and consider colectomy when serrated adenomas are found (see page 404).

Personalising cancer prevention

We are constantly exposed to mutagenic chemicals in our diet, such as heterocyclic amines (HAAs) which are present in meat cooked at high temperature and in tobacco smoke. These compounds have to be activated by CYPIA2 and N-acetyltransferase-2 (NAT2) before they can damage DNA. Importantly, these enzymes have variable activity from person to person, which suggests that the cancer-causing potential of HAAs will also vary between people. A research team led by Le Marchand has now assessed in a multi-ethnic population whether people with rapid CYPIA2 and NAT2 activity have a higher risk of colon adenomas if they smoke or eat well-done meat. They found that smoking or eating well-done meat in conjunction with having rapid NAT2 activity was associated with an increased adenoma risk. If confirmed, these results have the potential to be used to individualise cancer prevention programmes (see page 416).

Management of patients with increased risk for familial pancreatic cancer: the (CAPS) Consortium report

In this issue of Gut, we are very pleased to publish the International Cancer of the Pancreas Screening (CAPS) consortium consensus report on screening, surveillance and management of high-risk individuals with an inherited predisposition to pancreatic cancer. A 49-expert multidisciplinary international consortium met to discuss pancreatic screening and considered the following key questions: (1) Who should be screened? (2) How should high risk individuals be screened and followed up? (3) When should surgery be performed? (4) What are the goals of screening and what outcome should be considered a success? The consensus report, which is freely available in this issue of Gut, represents state of the art knowledge on this subject and we highly recommend this for all gastroenterologists and workers in the field (see page 339).

Hepatology
HRP-3 as a novel important factor in hepatocellular carcinoma

Hepatoma-derived growth factor-related proteins (HRPs) are known to be overexpressed in various human cancers. This comprehensive study from China (page 440) investigated the relevance of HRP-3 in human hepatocellular carcinoma (HCC). HRP-3 was found to be overexpressed in many human HCCs and HRP-3 overexpression was a predictor of lower survival probability (figure 1C). In vitro experiments showed activation of the ERK pathway by HRP-3 which promoted anchorage-independent growth of HCC. Moreover, knockdown of HRP-3 enhanced the response of HCC cells to chemotherapy and decreased tumour growth in vivo. Altogether HRP-3 seems to play an important role in HCC and may serve as a novel prognostic marker and molecular target for treatment of HCC.

Figure 1 Kaplan-Meier analysis of overall survival in 54 patients with hepatocellular carcinoma related to hepatoma-derived growth factor-related proteins-3 expression.