Laparoscopy for abdominal cancer

To the Editor: With growing interest in the application of laparoscopic techniques in abdominal surgery and the universal acceptance of endoscopic cholecystectomy, there is now work in progress both in the United States and in Europe to apply the technology to colonic surgery. I wish to report a case where sigmoid colectomy was performed by means of a laparoscopic technique, which enabled a safe separation for colon cancer and an early discharge from hospital.

An 80-year-old woman presented with an adenocarcinoma of the distal sigmoid colon. The site of the lesion was confirmed at laparoscopy, and the liver was checked for metastatic involvement. Laparoscopic instruments were used to prepare the proximal limb of the anastomosis. The mesentery of the sigmoid colon was divided, and the vessels were ligated with titanium clips. The inferior mesenteric artery was divided at the paracolic gutter between ligatures that were tied using an extracorporeal knotting technique. The distal anastomosis was prepared by dissection of the distal sigmoid. The rectum was made using a “double-stitch” technique. Sigmoidectomy incision was made low in the left iliac fossa. The cancer and mobilised bowel were exteriorised and resected. An end-to-end anastomosis was created with the circular stapling device.

The patient passed a wind and liquid stool on the second postoperative day and was mobilised with little abdominal pain. She was considered fit for discharge on the third day, but was kept in hospital for routine observation for a further 24 hours.

The pathology report confirmed the diagnosis of a moderately differentiated adenocarcinoma, Duke’s stage B. The 10 nodes sampled in the sigmoid mesentery were all free of metastatic involvement.

There is obviously an important future for laparoscopic colonic surgery. When intracorporeal stapling devices become available in this country later in the year, it will be possible to perform similar operations by a totally closed technique, with extraction of the specimen through the rectal stump, depending on the size of the primary tumour.

I have attended operations in America where intracorporeal dissection of the rectum was made down to the level of the levator plate, with surprising accuracy and ease. Lower anorectal resection has not yet been performed, but it is certainly feasible, and the approach may also be useful for abdominal-perineal excision of the rectum.

Tim Wilson, MB BS, FRACS, FRCS, FRCS(Edin)
The Institute for Minimal Access Surgery Sydney Hospital, Macquarie Street, Sydney, NSW 2000

Detecting the cause of Lyme disease in Australia

To the Editor: Classical Lyme disease, a syndrome comprising arthralgia, constitutional illness, and skin lesion, is now reported to be widespread throughout the Northern Hemisphere, where it is transmitted to humans through bites of a species of Ixodes tick that acquires the causal agent Borrelia burgdorferi during the developmental stages of its life cycle on wild mammals.

Despite the absence from Australia of the primary Northern Hemisphere vector, Ixodes dammini, and its main vertebrate reservoir, the deer, since 1982 there have been sporadic reports of a syndrome like Lyme disease occurring in central coastal Australia. We report a serological survey conducted at the North-Western Medical Hospital during 1988–1989 and 1989–1990, which involved 65 controls and 65 cases of Lyme disease, and found that 12% of the controls and 38% of the cases had a positive indirect fluorescent antibody test for Lyme disease. In central coastal New South Wales there are tick-borne infections, from both physicians and farmers, of ECM and complications following tick bites. In the same area, veterinarians occasionally recognize a Lyme disease syndrome in dogs and livestock, where the major presenting sign is anorexia. Assuming that this syndrome is not caused by a vector-borne, zoonotic Lyme disease-like syndrome in Australia for which the incidence, prevalence and natural history will only become clear once its aetiology is established.

The starting point for our study, and for the preliminary results presented below, has been the notion that Australian Lyme disease is caused by a spirochaete, similar but not necessarily closely related antigenically to B. burgdorferi, and that the spirochaetes cycle through native fauna and domestic animals, transmitted to a tick with a wide range of hosts.

One of us (M C W) has cultured the gut contents of a large number of ticks (mostly adult female in engorged in I. holocyclus, but also a smaller number of both I. holocyclus nymphs and adult Haemaphysalis spp.) in an attempt to detect likely spirochaetal spirochaetes. The ticks were collected from various areas in the Hunter Valley and Manning River districts of coastal New South Wales, many from pets and domestic livestock, some of which were clinically lame. Some specimens were used in BSK medium (a formulation developed for B. burgdorferi) but were periodically examined by dark field microscopy for the presence of spirochaetes. To date, 70 of 167 ticks (42% of all ticks) were culture positive for Borrelia-like spirochaetes within eight weeks of inoculation into BSK medium. The isolation rate was higher for I. holocyclus (44%) than for Haemaphysalis spp. (35%). All initial isolates were in mixed culture, with Gram negative rods and sporulated bacilli predominating. So far systemic infection and subcutisisation have enabled us to purify nine isolates of tick-borne spirochaetes.

A significant observation is that B. burgdorferi (B31), they are large, coiled motile bacteria with an irregular rotational movement. All have fastidious growth requirements, growing only in BSK medium. Antibody responses are similar, using both monoclonal and polyclonal sera prepared against B. burgdorferi, indicates that at least four of our pure isolates share antigenic epitopes with classical B. burgdorferi, as detected by ELISA, immunoblotting and western blotting. But analysis indicates that at least three strains have a 30,000 molecular weight structural protein that reacts antigenically with monoclonal anti serum to B. burgdorferi surface antigen, outer surface protein A (Ospa).

These findings indicate that some species of tick are responsible for human and animal tick bites in this country, but more research is needed on the epidemiology of Lyme disease in Australia.

Michelle C Williams, BS(agr)
Division of Microbiology, Hunter Area Pathology Services John Hunter Hospital
Rankin Park, NSW 2287

Richard D Barry, MA, BVSc, Phd, Scb, FASM
Toowoomba Department of Microbiology, The University of New Castle Rankin Drive, Newcastle, NSW 2300

Acknowledgments: During our study we received generous assistance from the Department of Health, Commonwealth of Australia, and we gratefully acknowledge this assistance. The intramural funding is from the Department of Health, but we thank Dr D Shuten for his advice and assistance.


Caffeine and disease

To the Editor: While debate continues about caffeine ingestion and cardiovascular disease, 2, 4, 5, 6, 7 the presented evidence for a number of adverse outcomes from caffeine,软 drinks, coffee, and chocolate, is in fact evidence against caffeine ingestion. Caffeine is an ingredient of many different medications including anti-inflammatory preparations, sedatives, analgesics, and psychiatric agents. Caffeine is available from a number of sources including coffee, soft drinks, chocolate, and cocoa, all of which are known to be associated with cardiovascular disease.

Caffeine deficiency is not uncommon, especially in the elderly, in patients with cardiovascular disease, and in those with gastrointestinal complaints. Caffeine deficiency is associated with a wide range of symptoms, including mood changes, irritability, anxiety, and gastrointestinal complaints. Caffeine deficiency is associated with both pharmacological and physiological effects. Caffeine deficiency is associated with both pharmacological and physiological effects. Caffeine deficiency is associated with both pharmacological and physiological effects.