# Splenic injury following routine colonoscopy

*DS Melsom, SJ Cawthorn*

Colonoscopy is a safe procedure (Ong et al, 1991) but serious injuries to the abdominal viscera are described (Habr-Gama and Waye, 1989). In this report a single case of splenic injury is described after routine surveillance colonoscopy.

## DISCUSSION

The common complications following colonoscopy are bleeding (0.4–2.7%) and perforation (0.06–0.57%). Caecal volvulus, vasovagal attacks, bacteraemia, ileus, serosal tears, pneumothorax and complications relating to sedation and bowel preparation have been reported (Wherry and Zenner, 1974; Ellis et al, 1979). Injuries to other viscera are extremely uncommon and are therefore often overlooked.

## CASE REPORT

A fit 65-year-old woman underwent day case surveillance colonoscopy for adenomatous polyps. The colon was normal and no biopsies were taken. The patient was discharged after 2 hours uneventfully.

The following day she was readmitted with left flank pain. She was cardiovascularly stable but was found to have rebound tenderness and guarding over her left flank. Over 3 days her haemoglobin level dropped from 10.4 to 7.9g/dl and she developed left shoulder tip pain. An ultrasound scan showed free fluid around the spleen with a possible subcapsular haematoma. A computed tomography scan (*Figure 1*) confirmed this, with no evidence of splenic rupture. The patient was kept on bedrest for 2 weeks and given iron supplements. She made an uneventful recovery and was well in outpatients 4 weeks later.

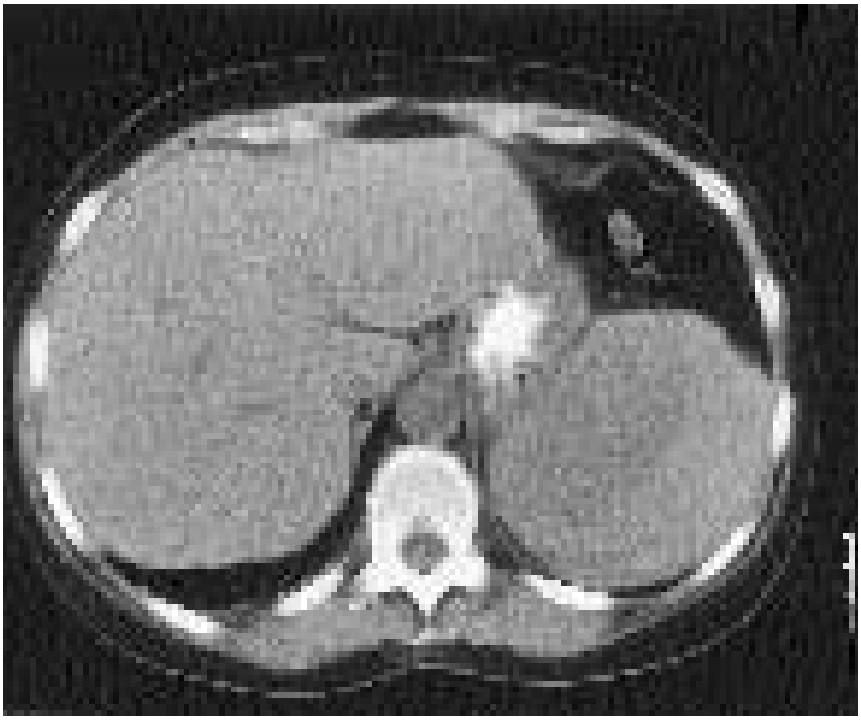

***Figure 1. Computed tomography scan on day 5 showing extensive subcapsular haematoma.***

This is the first reported case of splenic injury at this hospital where more than 500 colonoscopies are performed each year.

The first recorded case of splenic rupture was recorded by Wherry and Zenner in 1974 but since then only 15 further cases have been cited. There has been only one other reported case of subcapsular haematoma (Viamonte et al, 1992).

Reasons for splenic trauma include traction on the spleno-colic ligament, increased adhesions between the spleen and colon, e.g. after previous surgery, or direct trauma. In four cases, adhesions were implicated as the likely cause and in only one report was the procedure particularly difficult.

Splenic trauma after colonoscopy is rare. Care must be used, however, in certain patients with high-risk factors (i.e. adhesions and haematological disorders). HM

Ellis WR, Harrison SM, Williams RS (1979) Rupture of the spleen at colonoscopy. *Br Med J* **i:** 307–8

Habr-Gama A, Waye JD (1989) Complications and hazards of gastrointestinal endoscopy. *World J Surg* **13:** 193–201

Ong E, Bohmer U, Wurbs D (1991) Splenic injury as a complication of endoscopy: two case reports and a literature review. *Endoscopy* **23:** 302–4

Viamonte M, Wulkan M, Irani H (1992) Splenic trauma as a complication of colonoscopy. *Surg Laparosc Endosc* **2(2):** 154–7

Wherry DC, Zehner H (1974) Colonoscopic fibreoptic endoscopic approach to the colon and polypectomy. *Med Ann DC* **43:** 189–92

**Mr DS Melsom** is Senior House Officer in the Department of Plastic Surgery and **Mr SJ Cawthorn** is Consultant in the Department of General Surgery, Frenchay Hospital, Bristol BS16 1LE

*Correspondence to: Mr DS Melsom*