INTRODUCTION

We describe the case of a 59-year-old man who was investigated for weight loss and iron deficiency anaemia who had the appearances of florid colitis on abdominal computed tomography (CT), but in whom colonoscopy had been completely normal 24 h before the CT examination. Our patient had colonoscopic colitis, which resolved spontaneously within 12 days. We review the literature on this little-recognized condition and recommend that radiological investigations of the bowel be postponed for a suitable period after lower bowel endoscopy.

CASE REPORT

A 59-year-old man with nephrotic syndrome was admitted to hospital for investigation of fever, weight loss, microcytic anaemia and a raised white cell count, differential and platelet count were normal. Further investigations were performed. Faecal microscopy and culture were negative. His stool was negative for ova, cysts and parasites and was Clostridium difficile negative. All other bacteriology and virology screens were negative. Tumour markers carcinoembryonic antigen (CEA), alphafetoprotein, CA19-9, and β-human chorionic gonadotrophin (HCG) were all normal. A chest radiograph was unremarkable. Abdominal and pelvic CT revealed extensive thickening of the transverse and descending colon including the splenic flexure (Fig. 1). In addition the adjacent mesenteric fat had a streaky appearance, but there was neither intramural gas nor free intraperitoneal air. These changes were thought to be consistent with colitis or a lymphoproliferative disorder, although there was no evidence of intra-abdominal lymphadenopathy. These findings were surprising given the patient’s lack of symptoms and the normal colonoscopy, which had coincidently been performed only 24 h before CT. CT was repeated 12 days later, at which time the large bowel changes noted previously had completely resolved and the scan was entirely normal (Fig. 2). No treatment had been given.

The patient’s renal function has stabilized and his proteinuria is improving though he remains under investigation for iron deficiency and weight loss.

DISCUSSION

Case reports describing colitis after colonoscopy or proctitis after flexible sigmoidoscopy have been appearing in the literature since the late 1980s, although there is very little general awareness of this problem [1–8]. The majority have described a self-limiting illness characterized by diarrhoea, bloody stools and abdominal cramping developing within 24 h after endoscopic imaging of the lower bowel. Two studies based on retrospective analysis of patient questionnaires have reported the incidence to be 3.3–5% [6,7]. Colonic lesions that develop post-endoscopy resemble those found in ischaemic...
colitis [5]. The cause of this type of colitis is thought to be contamination of the endoscope with 2% glutaraldehyde disinfectant, residual from the cleaning process. Importantly for this case, glutaraldehyde is the disinfectant used routinely at the Hammersmith Hospital.

The role of glutaraldehyde in this condition is supported by two lines of evidence. First, glutaraldehyde application into the bowel of experimental animals causes lesions similar to those described in humans [3]. Second, the incidence of colitis after endoscopic procedures where glutaraldehyde is not used is significantly lower, at 0.2–1.2% [6,7].

Two other studies have described a different entity, with a pseudomembranous-like colitis developing post-endoscopy [1,2]. This condition is related to the use of hydrogen peroxide disinfectant [2]. Glutaraldehyde- and hydrogen peroxide-induced colitis were reviewed in 1995 [9].

The non-specific radiological features of glutaraldehyde colitis have been documented in at least two studies [10,11] and are characterized by circumferential colonic wall thickening with variable contrast enhancement, most usually involving the descending and transverse colon. Non-specific changes in the peri-colonic or peri-rectal fat have also been described. The findings in our patient are entirely consistent with these descriptions. As has been stressed before, the diagnosis should be suspected if the CT abnormalities are first seen post-colonoscopy, particularly if the colonoscopy was normal [11].

Compared with others described, our patient was unusual in that he was asymptomatic and his colonic abnormalities were picked up only because of the timing of his CT examination in relation to his colonoscopy. The incidence of such asymptomatic colitis is unknown. It is likely that in this particular patient, that CT appearances were exacerbated by hypoalbuminaemia secondary to nephrotic syndrome, but this was not the sole reason for the CT findings, as the abnormalities resolved within 2 weeks, despite a persistently low serum albumin.

We recommend that colonic radiographic abnormalities after colonoscopy be interpreted with caution and that radiological investigations after colonoscopy be delayed to allow iatrogenic changes to subside.

REFERENCES