variety of resultant symptoms. Contrast enhanced MRI is the imaging procedure of choice for diagnosis and follow-up. Gallium scanning and ACE measurement in serum and cerebrospinal fluid may be helpful but lack sensitivity and specificity. The same is true of increased protein and mild pleocytosis (usually lymphocytosis) in the cerebrospinal fluid. Definitive diagnosis of sarcoidosis requires biopsy evidence of non-caseating necrotizing granulomas.⁵

Hypothalamic-pituitary sarcoidosis is treated with corticosteroids together with anterior and posterior pituitary hormone replacement. Corticosteroids lower the CD4/CD8 lymphocyte ratio, decrease interleukin-2 production, and inhibit collagen synthesis, all of which are abnormal at the sites of active disease within the brain. When the dose of prednisolone is lowered to 20–25 mg daily the symptoms commonly recur. There are few data on other immunomodulatory therapies, but ciclosporin, radiotherapy, azathioprine, chlorambucil and cyclophosphamide have all been used with disappointing results.¹ Surgical intervention is indicated in cases of hydrocephalus or when an expanding mass lesion causes an increase in intracranial pressure.

Clearly, treatment of hypothalamic-pituitary sarcoidosis has made great advances since 1971, when the median survival was only 45 months.² The patients reported here were two of only three diagnosed in our unit over that period. The third, a 26-year-old man, was seen in 1986 with panhypopituitarism. On replacement therapy he remains well 19 years later. Unfortunately the condition can still cause sudden unexpected death.⁶

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Giant colonic diverticulum

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A large air cyst in the peritoneal cavity can present diagnostic and therapeutic dilemmas.

CASE HISTORY

A man aged 82 was seen after a week of gradually increasing dull left upper quadrant abdominal pain, worsened by movement and associated with abdominal distension and constipation. There was no history of nausea, vomiting, change in bowel habit or weight loss. The medical history included rheumatoid arthritis and peptic ulcer disease. On examination he had a non-tender central abdominal mass, resonant on percussion. A plain abdominal X-ray showed a large central air-filled cyst, and air was seen throughout the colon and rectum. On contrast-enhanced CT (Figure 1) the cyst was 15 cm in diameter and did not seem to communicate with the bowel (no entry of contrast material taken orally).

At laparotomy the cyst proved to be adherent to the bladder and sigmoid colon. It contained only gas—no urine, fluid or faeces—and no communication with the bowel wall or bladder wall was seen. The large bowel was free from diverticular disease but a few diverticula were noted along the mesenteric border of the jejunum.

The cyst was excised. Postoperatively, the obstructive symptoms completely resolved but the patient later developed pneumonia and died. On histological examination, faecal and food material was identified in granulation tissue within the lining of the cyst wall. In addition there was a small amount of colonic muscularis mucosa. The lesion was therefore categorized as a type I giant colonic diverticulum (Box 1).

COMMENT

Preoperative diagnosis of a giant colonic diverticulum can be difficult even with the aid of contrast-enhanced CT and barium enemas. Most patients are in their 60s or over, and the presentation can be acute or chronic. In some the

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Figure 1 Contrast enhanced axial CT image confirming a thin-walled air-filled structure with no communication to the sigmoid colon (white arrows)

Box 1 Histological types of giant colonic diverticulum

Type I	Pseudodiverticulum	Composed of granulation tissue and remnants of muscularis mucosa
Type II	Inflammatory diverticulum	Arises from local perforation and communicates with an abscess cavity
Type III	True diverticulum	Contains all the layers of bowel wall

symptoms are due to complications such as volvulus, bowel obstruction, perforation, rectal bleeding or even carcinoma.³ Giant colonic diverticula are caused by entry of gas that cannot escape because of a ball-valve mechanism. Usually they originate from the sigmoid colon. The differential diagnosis includes duplication cysts and pneumatosis intestinalis. On CT, duplication cysts are usually fusiform and fluid filled, whereas giant colonic diverticula tend to be oval, central and gas-filled. Duplication cysts differ from types I and II giant colonic diverticula in including all four layers of the bowel wall. Type III (true diverticula) do show all four walls and are less easily distinguished. In pneumatosis intestinalis, multiple air-filled cysts arise on the mesenteric border of the intestine and their walls contain only smooth muscle.

Regarding treatment, successful needle aspiration has been reported, but without long-term follow-up.⁴ Some surgeons recommend diverticulectomy to prevent recurrences;⁵ others do not, because of the surrounding inflammation and the possibility of a wide diverticular neck.^{1,2} Colectomy is an alternative, and seems to have the same complication rate as diverticulectomy.²

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