

fistula without induration. His complaints had disappeared. Three months after operation he had an elective proctocolectomy. At laparotomy not only a gastrocolic but also an ileosigmoid fistula was found. Both fistulas and the entire colon and rectum were removed via the intersphincteric approach for removal of the rectum, though severe rectal inflammation made the procedure difficult. The gastrocolic fistula was also resected, and the patient made an uncomplicated recovery, gaining 30 kg; the perineal wound has healed completely.

Comment

The diagnosis of granulomatous colitis causing gastrocolic fistula is almost always based on barium enema examination. The fistulous opening is usually so small that it does not show on gastric contrast radiography because the stomach empties preferentially by antral contraction. In our severely malnourished patient—who had been in hospital for a long time—we had the option of using preoperative total parenteral nutrition or performing a simple laparotomy and defunctioning loop ileostomy. Our experience with the latter in debilitated patients had been extremely encouraging, and, although total parenteral nutrition is useful in severely depleted patients, it is expensive, time-consuming, and has complications. Loop ileostomy is simple and easy to perform even in severely ill patients. His recovery in terms of both bowel function and nutrition suggests that this simple technique may be applied more widely.

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Ruptured spleen after electric convulsion therapy

Reported injuries in abdominal organs after ECT are rare and include perforation or bleeding from peptic ulcers and perforated viscera.¹⁻³ We report here for the first time a ruptured spleen after ECT.

Case report

A 50-year-old woman suffering from severe endogenous depression was admitted to Newtown Hospital, Worcester, in December 1978 for a course of electric convulsion therapy (ECT). On 18 December she had her first session of treatment without incident, and the second two days later. On both occasions she received 8 ml (80 mg) methohexitone sodium, 13 mg atropine, and 30 mg suxamethonium chloride. Within four hours of her second session of treatment, however, she began to complain of increasingly severe epigastric pain radiating to the back below her scapulae associated with pain in her right shoulder-tip and a worsening acute pain in her abdomen. She had a short history of epigastric discomfort after meals relieved by antacids and exacerbated by fats. There was no history of trauma. A perforated duodenal ulcer was tentatively diagnosed, and she was transferred into the care of a surgical team.

At emergency laparotomy she was found to have several litres of free blood and clots in her peritoneal cavity resulting from a ruptured spleen of normal size. This was subsequently found to be histologically normal. There was no evidence of duodenal ulceration. Splenectomy was performed.

Comment

This patient presented no history of trauma or splenic disease, and her spleen was histologically normal. Spontaneous rupture of the

spleen is a well-recognised but rare condition.^{4,5} Nevertheless, the time from her second session of treatment to the onset of symptoms (under four hours) strongly suggests that the ECT was relevant to the development of the ruptured spleen.

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Symptomatic treatment of primary pneumatosis coli with metronidazole

Pneumatosis coli is a benign condition even though the symptoms may be disabling. Gas cysts are found predominantly in the left side of the colon and the rectum. The condition must be distinguished from secondary pneumatosis cystoides intestinalis, in which subserosal gas is found anywhere in the gastrointestinal tract and its mesentery, and from the infantile type, which is associated with necrotising enterocolitis. The aetiology remains obscure. The two most popular concepts are the pulmonary theory and that of the anaerobic gas-forming organism.

Case reports

(1) A 61-year-old woman presented with a seven-year history of excessive flatulence; diarrhoea with excessive mucus, often with incontinence; and vague lower abdominal pain. She also suffered from depression and mild chronic bronchitis. The results of physical examination and sigmoidoscopy were normal. Barium enema showed pneumatosis coli from the mid transverse colon to the rectosigmoid region. These changes were also apparent on plain radiographs. On three occasions she was admitted for oxygen treatment.¹ Each time her symptoms were relieved for only a few weeks. Finally she was treated with metronidazole 400 mg twice daily. Within two days her symptoms had disappeared completely. Two weeks later the drug was stopped and the symptoms returned gradually over 10 days. Reintroduction of metronidazole again controlled her symptoms although there was little change in her plain abdominal radiographs.

(2) A 72-year-old woman presented with a similar history. In addition she suffered from chronic bronchitis and bronchiectasis. Physical examination revealed the impression of soft "stool-like" masses over the descending colon. Rectal examination suggested the presence of a soft annular carcinoma. Sigmoidoscopy, however, revealed large rectal gas cysts, which were confirmed histologically. Barium enema examination showed extensive cysts in the rectum and colon distal to the hepatic flexure. Treatment with metronidazole 400 mg twice daily immediately relieved her abdominal symptoms. "Remission" has been maintained by five days' treatment every 2-3 weeks.

Comment

There is now strong circumstantial evidence that the gas produced in primary pneumatosis coli is of bacterial origin.²⁻⁴ Despite the frequent association with pulmonary disease the gas has a high hydrogen content and is therefore unlikely to originate from the chest. Lactulose, which depends on bacterial fermentation for its action, is known to aggravate the symptoms. Furthermore, end expiratory concentrations of hydrogen are raised in these patients and are further raised after lactulose challenge. Pulmonary disease may affect the clearance of hydrogen, leading to its accumulation at the site of