

HAEMOPERITONEUM ASSOCIATED WITH A SOLITARY DIVERTICULUM OF THE SIGMOID COLON

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No report has been found in the literature of a haemoperitoneum occurring during life in association with a diverticulum of the colon, and it was therefore thought that this case should be recorded.

CASE REPORT

History

Mr. J.T., aged 52 years, an outfitter, was admitted to hospital on 31 January 1959. He was complaining of hypogastric pain for 2 days, described as a dull ache. He had vomited once before the pain started, and once afterwards. He had pain in the right shoulder. He was habitually constipated, and since mecamlamine treatment he had taken increasing doses of senna; he had recently noted that his mouth was dry.

Past History

He was found to be hypertensive in 1953, and his blood pressure varied between 250/145 and 160/110 mm.Hg. In 1957 he had a haemoptysis and later a transient dysarthria, from which he made a complete recovery. In 1958 treatment with 'inversine' was started, and he received 7.5 mg. 8-hourly; his blood pressure being stabilized at 130/95 mm.Hg.

Examination

Blood pressure 150/95 mm.Hg. Pulse 96. Temperature 99°F. He had lower abdominal tenderness, maximal in the right iliac fossa, with guarding and rebound tenderness. Bowel sounds were present. On rectal examination he was tender on the right side. The peripheral pulses were present. A provisional diagnosis of acute appendicitis or acute diverticulitis was made.

Operative Findings

An emergency laparotomy was carried out. There were about 500 ml. of unclotted blood in the peritoneal cavity. The source of bleeding was the sigmoid colon where there was a large haematoma on the side of the bowel, not extending into the mesentery. When this was disturbed, fresh bleeding occurred from what appeared to be a longitudinal split in the sero-muscular coat. There was no faecal contamination. Apart from a chronic duodenal ulcer no other abnormality was seen; in particular no other diverticula were noted. A sigmoid colectomy was carried out, and continuity re-established by an end-to-end anastomosis.

Postoperative

He made a good recovery and his bowels worked normally on the fourth day.

Special Investigations

Full blood count and platelet count were normal. A skin and muscle biopsy from the left thigh showed non-specific changes in the vessels, compatible with long-standing hypertension.

Pathology

The specimen consisted of a segment of colon 15 cm. long. On the anti-mesenteric surface of the bowel, between the lateral taenia coli, there was a solitary diverticulum whose base was 3 cm. in diameter; the lining of the diverticulum was intact and it was surrounded by blood clot.



Fig. 1. See text.

Fig. 1 shows the specimen from the serosal aspect—the contracted taenia are clearly seen.

The histological report was as follows: 'Study of 3 sections from the edge of the diverticulum shows both submucosal and subserosal haemorrhage, with separation of mucosa from muscle by blood and fibrin, mixed with polymorphs. At this point the muscle coat, and apparently also the serosa, cease, leaving the diverticular wall consisting of mucosa supported by haemorrhagic submucosa, possibly fused with some serosa. Soon the mucosa is lost, and the wall then consists of necrotic connective tissue, presumably mainly submucosa'.

DISCUSSION

Solitary diverticula of the large bowel have been reported fairly often, by Dorling,¹ Fairbank and Rob,² Kirkman,³ and others, and in these cases the clinical picture was caused by acute inflammation. Although the appendices epiploicae are well supplied with blood vessels, intraperitoneal bleeding

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does not occur, presumably because of inflammation causing thrombosis in the peridiverticular vessels.

In the present case the lack of gross inflammatory changes therefore seems to be significant, and it is suggested that the bleeding occurred as a result of the hypertensive changes in the blood vessels themselves, and that the diverticulum was secondary to this change as well, originating in an infarcted area. The histological appearances of small vessels in the colon were identical with those in the muscle biopsy. A similar experience is reported by Woolf and Thompson.⁴ In their 3 cases of spontaneous intra-abdominal bleeding, all the patients were hypertensive, with hypertensive changes in the smaller vessels.

It is difficult to decide whether or not mecamlamine played any part, but Addison and Towers⁵ have recently reported a case of subserous jejunal haemorrhage during therapy with this drug.

SUMMARY

A case of haemoperitoneum is described, associated with a solitary diverticulum of the sigmoid colon. The patient was a known hypertensive, receiving mecamlamine. The blood vessels showed hypertensive changes, and it is suggested that the diverticulum and haemoperitoneum were secondary to this.

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