Medical Memoranda

Localized Diverticulitis of the Transverse Colon

The rare occurrence of localized diverticulitis in the transverse colon was referred to by Lockhart-Mummery (1949), who reported a case of his own. He was able to find record of only one similar case in the literature. The following case conforms pathologically to the descriptive term "localized diverticulitis of the transverse colon," and is similar in many respects to that of Lockhart-Mummery.

Case Report

A married woman aged 54 was admitted to hospital on December 12, 1949, as an acute abdominal emergency. She had never before complained of symptoms referable to the abdomen, had always enjoyed good health, and had never complained of constipation nor taken aperients.

Twenty-four hours before admission she noticed the onset of a dull aching pain in the lower abdomen. For the eight hours before admission this pain had become more severe and had localized in the right iliac fossa. She described it as being "like toothache"; it was persistent, no relief being afforded by recumbency or local application of heat. She complained of intense nausea and a feeling of fullness. She had not vomited, and her bowels had been normally opened on the morning of the day of admission. Micturition was normal.

On examination her temperature was 100.5° F. (38.05° C.) and pulse rate 120. Her tongue was dry and coated, but fetor oris was not noticed. Her abdomen showed slight generalized distension. There was guarding in the right iliac fossa, and the maximum point of tenderness elicited was just below and to the right of the umbilicus. Auscultation detected normal peristalsis. Rectal examination was negative, and a ward test of a urine specimen revealed no abnormality. A provisional diagnosis of acute appendicitis was made.

At operation a hard mobile tumour in the transverse colon was found an inch or two to the right of the mid-point. It measured about 3 by 3 in. (7.5 by 7.5 cm.), and encompassed about half the circumference of the bowel, extending into the mesentery. It was firm in consistency and white in colour. The colon proximal to the tumour was normal in calibre, and there was no evidence of enlarged regional glands or hepatic deposits. There was no naked-eye evidence of diverticula in the rest of the large bowel, and the mass was considered to be neoplastic in origin.

Recovery from operation was uneventful except that on the eleventh post-operative day the patient developed signs of left-sided deep venous thrombosis in the calf. This complication responded to a firm crepe support and anticoagulant therapy.

Pathology.—The specimen consisted of 18 cm. of bowel, together with the tumour already described. The tumour, when transected at right angles to the long axis of the bowel, was found to be an inflammatory mass surrounding a large diverticulum (Fig. 1). The latter projected from the lumen into the mesentery, its size being that of the terminal phalanx of the little finger. Its lining had a haemorrhagic and necrotic appearance. The surrounding inflammatory mass was of solid consistency and formed a wedge-shaped mass, whose apex extended into the mesentery. The microscopical report was as follows: "A complete section of the area of cavitation in the bowel wall shows the typical appearance of acute diverticulitis with heavy acute inflammatory cell infiltration of the pericolic and mesenteric tissues. The diverticulum retains a small amount of mucosal lining, but no muscle tissue can be seen in its wall" (Fig. 2).

FIG. 1.—Photograph showing appearance of the diverticulum in the centre of a wedge-shaped inflammatory mass.

FIG. 2.—Low-power photomicrograph of the diverticulum.

Comment

A diverticulum of this size, position, and histological structure is necessarily of the "acquired" variety, but the pathogenesis of a solitary diverticulum in this position is problematical. Fairbank and Rob (1947), reporting two cases of isolated diverticulitis of the proximal colon, suggest that the process is one of simple localized ulceration of the mucosal surface progressing to the formation of a false diverticulum. The acutely inflamed and necrotic appearance of the diverticular lining in my case certainly lends favour to this explanation. The complete absence of previous abdominal symptoms and the comparatively rapid onset of the disease suggest an equivalently rapid pathogenesis. The fact that no other diverticula could be found is, as Dorling (1945) suggests, against the cause being due to pulsion from within, as in multiple diverticulosis of the descending colon, when symptoms of constipation and lower abdominal pain invariably occur.

I wish to thank Mr. Richard Charles, of Ipswich, for allowing me to treat and publish this case, and Dr. Trevor Shaw, of Ipswich, for the pathological report.

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REFERENCES

- Dorling, G. C. (1945). *British Medical Journal*, **1**, 513.
Fairbank, T. J., and Rob, C. G. (1947). *Brit. J. Surg.*, **35**, 105.
Lockhart-Mummery, H. E. (1949). *Ibid.*, **36**, 319.