Reticulum-cell sarcoma is now recognized as an uncommon small intestinal tumour, but reports of its occurrence, increasing in number during the past 15 years, are still relatively few. Records of cases in which perforation has taken place are even more seldom found in the literature, and accordingly the present case is considered worthy of report.

The patient reported here is older than any other whose record I have been able to find.

Case Report

J.S., a shopkeeper, aged 83, was admitted on June 27, 1954, complaining of lower abdominal pain for three days. At first his pain was slight, but it was becoming more intense and colicky in nature. He had had some nausea, but no vomiting. For the past three days his bowels had moved, only a small motion being passed on each occasion. Flatus was still being passed. During the past one month he had been aware of gradually increasing constipation. He had had no diarrhoea, and had passed no blood. He was aware of having lost weight for some weeks. Nineteen years previously he had attended the Middlesex Hospital with signs and symptoms of tabes dorsalis. Argyll-Robertson pupils were present at that time, but information as to definite treatment was not available.

On examination he was seen to be a somewhat wasted, intelligent old man. There was moderate distension of the lower abdomen extending into the flanks. No mass was palpable. There was some generalized lower abdominal tenderness, but no true rigidity. Bowel sounds were accentuated. Rectal examination revealed no definite abnormality, apart from some external haemorrhoids. His abdominal and leg reflexes were absent, both plantar responses were extensor and both pupils reacted to accommodation, but not to light. A diagnosis of incomplete intestinal obstruction was made, the obstructing lesion being thought to lie in the pelvic colon. Chest X-ray showed only chronic bronchitis and emphysema; straight X-ray of the abdomen showed dilated small and large bowel shadows with fluid levels, the colonic shadow disappearing on the left side of the pelvis. Haemoglobin was 74 per cent., and both W.R. and Kahn reactions were doubtful. An enema produced flatus only. Owing to his age and poor general condition, it was decided to try and treat him conservatively for a few days and improve his condition. He was given a full pre-operative course of phthalysulphathiazole, enemata were repeated daily with similar results, and daily mensuration of the abdomen showed no increase in distension.

Laparotomy was undertaken by Miss G. M. Barry on July 2, 1954. There was considerable small bowel distension with collapse of the colon, and numerous coils of small bowel were found lightly adherent to one another at the brim of the pelvis, with some degree of plastic peritonitis. In the ileum (the exact site could not be determined) a mass about 3 in. x 1½ in. (7.5 cm. x 3.5 cm.) was found adherent to the wall of the pelvis, just below the right inguinal ligament. No glands were palpable in the mesentery, and there was no evidence of any spread to the liver. No other lesion was found. When the tumour was gently separated from the pelvic wall an opening, about ½ in. (2 cm.) across was found, this opening having been sealed off by the pelvic wall attachment. A wedge resection of the ileum, well to each side of the tumour, with accompanying wedge resection of mesentery, was carried out, and end-to-end anastomosis performed with an omental graft covering. The abdomen was closed with drainage.

Post-operatively flatus was not passed until the fifth day, although bowel sounds were audible on the third day. At the end of the first week good progress was being made, and then he developed increasing abdominal distension with evident paralytic ileus. Routine conservative treatment was instituted, but despite every measure he gradually went downhill and died on the twelfth post-operative day: there was no clinical evidence of
any peritonitis during this period. Permission for post-mortem could not be obtained.

Pathological report on the specimen (Dr. J. W. Shackle) reads: 'This is a very cellular malignant tumour with many mitoses and some areas of necrosis. Apparently a reticulum-celled sarcoma.'

Comment

Wilkie (1953), who has thoroughly reviewed the available literature, reported a case in which perforations occurred on three occasions, but the total number of cases reported presenting with a perforation still appears to be less than 20. An exact figure is difficult to obtain because of the lack of differentiation between reticulum-celled sarcomas and lymphosarcomata. Frank, Miller and Bell (1942) review 361 cases of sarcoma of the small intestine and stress the rarity of perforation. They draw attention to a number of other case reports in which perforation occurred, but in at least one of these the growth was a lymphosarcoma. Lewis (1939), who collected six cases from the literature, added one of his own, but this also was reported as a lymphosarcoma. Joergenson and Weibel (1951), who review 100 small intestinal tumours, do not mention reticulum-celled sarcoma as a separate entity. They do, however, stress the very poor prognosis of this condition. Hindmarsh (1951) found 11 previous cases of perforated small intestinal sarcomata in the literature and added a further case, but again this is reported as a lymphosarcoma. Recovery followed emergency laparotomy and resection, which was followed by deep X-ray therapy. Williams and Fodden (1946) report an unusual case of a reticulum-celled sarcoma causing diverticulosis of the jejunal in a woman of 70.

The case reported here is remarkable for certain features. No case in this advanced age-group appears to have been previously reported. As far as could be ascertained, the lesion was solitary without any ascertainable spread. The perforation was of considerable size and yet it failed to give rise to any gross peritonitis. There is little doubt on histological grounds that the tumour here reported was a reticulum-cell sarcoma.

Summary

A further case of perforation of a reticulum-celled sarcoma of the small intestine is reported. The patient appears to have been considerably older than in any other previous report, and the lesion appears to have been solitary.

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WILKIE, D. (1953), Ibid., 41, 50.