Summary

Direct anti-globulin tests on the red cells from fresh clotted blood from 100 cases of malignant disease gave negative results. Positive results were obtained if the specimens were stored overnight at 4° C.

Indirect anti-globulin tests on the sera from some of these cases gave positive results against fresh group O rhesus-positive cells at 4° C. only, but this was abolished by previous absorption of the serum with secretor saliva. It was considered that the antibody involved was the incomplete cold auto-antibody described by Dacie (1950). Possible reasons for the discrepancy with other workers are discussed.

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Medical Memorandum

Caeco-colic Intussusception Following Appendicectomy

In 1953 Cleland found records of only five cases of intussusception in the immediate post-operative period following appendicectomy, and to these he added a personal case. A further case is here recorded.

CASE REPORT

A boy aged 10 was admitted to hospital on December 8, 1956, with a history of abdominal pain for 18 hours and the signs of acute appendicitis. Appendicectomy was performed the same evening through a muscle-splitting incision, and an acutely inflamed appendix, wrapped in omentum, was found, together with some free turbid fluid. The appendicectomy was carried out with the customary ligation of appendix stump and purse-string invagination, without carbolizing the base, and the abdomen was closed without drainage.

Recovery was at first uneventful, and an enema was given on the fourth post-operative day with a good result, but on the fifth evening he was seen because of a sudden attack of severe colicky pain, which made him cry out and draw up his legs in each spasm. On examination the general condition was good, pulse and temperature were normal, and the abdomen was soft between spasms, with no distension. Palpation over the ascending colon seemed to induce painful spasms and guarding, but no mass could be felt. Bowel sounds were slightly increased. Rectal examination was negative. Two hours later he vomited, but was easier, and soon went to sleep.

At 7 a.m. the next day he had a recurrence of the severe pain, and he vomited again, though his general condition was unchanged and pulse and temperature were still normal. However, inspection of the abdomen showed fullness on the right side, while palpation suggested a vague mass in the upper right abdomen, and induced severe pain and spasm. Bowel sounds were increased. The lower rectum contained constipated faeces, and inspection of the finger-stall revealed a small fleck of blood-stained mucus, more evident when wiped on to a piece of lint. A clinical diagnosis of intussusception was made. A portable scout x-ray examination

of the abdomen was made, but it added no further information. A white-cell count was 13,500 per c.mm.

At operation 14 hours after the onset of symptoms, through a right paramedian incision, a few ounces of clear yellow free fluid was found and the diagnosis of intussusception confirmed, the apex having reached the middle of the transverse colon. Reduction was at first easy, but towards the end the ensheathing layer serosa split, and required oversewing. The whole was quite viable and little altered in colour, except for the apex. The small bowel was noted to be only slightly distended. The apex was the previously inverted base of the appendix, and in the final reduction a little pus exuded from the centre of the purse-string, while the caecum for 2 cm. round was firm with oedema and reddened. The pus was let out and mopped away, and a little penicillin-sulphathiazole powder applied. No attempt was made to fix the caecum to the parietes, and the abdomen was closed without drainage.

Post-operatively, intravenous N/5 glucose-saline was given, 1 pint (570 ml.) six-hourly for 48 hours, and fluids only by mouth were continued to four days, when solids were started. Tetracycline, 250 mg. six-hourly, was given with the intravenous fluid, then changed to 125 mg. six-hourly by mouth for three further days, in view of the abscess found at the appendix stump. On the third day the child developed a right lower lobe collapse, which readily cleared with intensive physiotherapy. Three weeks after the second operation he returned home. He has since been seen twice at the out-patient department and has been well, with a good appetite, regular bowel action, and no chest complaint; both wounds were soundly healed.

COMMENT

In the seven recorded cases, including the present one, the age of the patient has been between 4 and 28 years. With one exception (on the twelfth day), the onset has been remarkably constant at about the fifth post-operative day.

The difficulty in diagnosis has been stressed by previous writers. Slight post-operative colic is not unusual some days after abdominal operations, but the severity of the intussusception colic was striking. Abdominal palpation is rendered difficult by the recent tender wound, though a mass was felt in four of the seven cases. Cleland stated that the absence of haemorrhage from the bowel seemed absolutely constant, but this is refuted by the present case.

In four recorded cases and in the above one a small abscess was present in the space enclosed by invagination of the appendix stump. Such abscesses have been noted at post-mortem examination soon after appendicectomy for acute disease, and it seems likely that they occur in many more instances never recognized. Cases have also been recorded where such an abscess ruptured into the abdomen, with the appearance of a ruptured viscus.

The rarity of intussusception is interesting in view of the "tumour" which must frequently be created by the oedema surrounding the invaginated and infected appendix stump on so many occasions. The infective element seems important, as no case has been recorded following a "cold" appendicectomy.

These possibilities give support to the view that, except where the stump is friable and insecure, careful ligation alone may be wiser than the added purse-string.

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