SEVERE HÆMORRHAGE FROM THE ASCENDING COLON, TREATED BY LIGATION OF THE ILEO-COLIC ARTERY. REPORT OF A CASE.

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Slight or moderate bleeding is a frequent symptom of many diseases of the large bowel, and of itself it rarely gives rise to acute anxiety. Severe haemorrhage is rare and its treatment difficult. Usually absolute rest, sedation, blood transfusion and chemotherapy are prescribed, and generally the patient recovers. Very rarely, as in the case about to be described, the bleeding is so violent, protracted and unresponsive to expectant measures that operative interference is undertaken in a last desperate attempt to save the patient’s life. Experience of such cases is limited by their very rarity, and it therefore seems important to record this case of profuse haemorrhage from the ascending colon successfully treated by ligation of the ileo-colic artery.

Sergeant D., aged 31, had always been healthy until early in August 1943, when he had an attack of diarrhoea which lasted twelve days. He passed about 10 watery stools per day which did not contain blood or mucus. After an interval of three days of constipation his diarrhoea recurred and lasted for another three weeks. He then became normal and felt perfectly well. His illness had upset him so little that he did not report sick, and he remained on duty.

A month and a half later, on 26.10.43, he was admitted to a C.C.S. with diarrhoea about 10-12 times daily. His stools contained neither blood or mucus, and beyond the inconvenience of his illness he felt quite well. As he did not improve on sulphaguanadine he was evacuated to this hospital on 30.10.44, with a provisional diagnosis of amoebic dysentery.

On admission his general condition was good, his temperature normal, the liver and spleen were not palpable and there was only slight tenderness in both iliac fossæ. Sigmoidoscopy revealed a normal lower rectum, and the swab showed only an indefinite exudate and no amoebæ.

During the next eight days the patient received 84 gms. of sulphaguanidine, and his stools became semi-solid and less frequent. On 6.11.43 he passed two normal stools, but with the second stool there were 2-3 oz. of clotted blood.

On the morning of 7.11.43 he suddenly became much worse, and at about midday he passed three pints of dark blood which contained a few clots. He rapidly became anaemic, and his hæmoglobin at 14.00 hours was found to be only 25 per cent. A blood drip transfusion was started immediately and morphia in adequate doses was administered.
The next morning, 8.11.43, after he had received four pints of blood he felt much better; his pulse was 88, temperature 99.4°F. and haemoglobin 70 per cent. The blood drip was continued at a slow rate throughout the day, and by evening he had received in all seven pints.

On 9.11.43 he passed two stools of almost pure blood, together amounting to 1½ pints. Both iliac fossae were tender, sigmoidoscopy revealed that the blood was coming down from somewhere above the lower rectum, and the patient's blood picture was: Hb. 74 per cent., R.B.C. 3:3m., W.B.C. 4500 (P. 79, L. 18, M. 2, E. 1), clotting time 7 minutes, bleeding time 3½ minutes. In view of the continuing hemorrhage the blood drip transfusion was restarted, three pints being given during that day and night.

On 10.11.43 his general condition was less satisfactory. His pulse had risen to 100, and during the night he had passed large clots of blood, in all amounting to one pint. His abdomen was slightly distended, and it was patent that he was bleeding rapidly and apparently uncontrollably into his bowel. It was therefore decided to attempt to find and ligate or exteriorise the bleeding area.

With this end in view he was transferred to the surgical division at 12.00 hours. The general data were: P. 100, R. 26, T. 99; B.P. 74/20; blood urea 68 mgms./100 c.c.; haemoglobin 40 per cent.

The blood drip transfusion was again restarted, and during the afternoon and evening two pints of blood were given. His general condition improved somewhat and his B.P. rose to 90/60.

On 11.11.43 he was no better; bleeding from the bowel was continuing. His haemoglobin was only 50 per cent. and his blood pressure was 84/50. After preliminary sedation with morphia and hyoscine operation was carried out.

**Operation**

1. Sigmoidoscopy. No satisfactory view was obtained of any part of the rectum as blood poured down from above in a continuous black flood.

2. With a blood drip transfusion running, under local infiltration and nerve block anaesthesia, the abdomen was opened through a long right paramedian incision. The cæcum and the whole large bowel were full of blood, which also extended for about four feet into the small intestine. In spite of a most thorough search, the only pathological area found anywhere in the gut was in the first two inches of the ascending colon, the whole circumference of which was slightly thickened (approx. ×2). It was not possible in this region to see the blood in the bowel, and no definite ulcer or pulsating mural vessel could be felt. In view of his very poor general condition and the absolute necessity for doing the minimum compatible with success, the ileo-colic artery was tied and divided between ligatures 1½ inches from the ileo-cæcal angle. It was a vessel approximately 5 mm. in
diameter, and its ligature resulted in slight blanching of the ascending colon, cæcum and terminal ileum. After watching the area for some minutes the abdomen was closed in layers, and the patient returned to his bed.

Following operation the patient’s condition rapidly improved. The next morning the blood drip transfusion was finally stopped, after the very large total amount of 19 pints of blood had been given in five days. His pulse was 94, T. 100.2°F., B.P. 110/65 and haemoglobin 82 per cent. No further fresh bleeding occurred from his bowel, only stale altered blood being subsequently evacuated.

In spite of repeated sigmoidoscopy, and search and culture of the stools, neither amoebae nor dysentery bacilli were ever discovered. Nine days after operation he had several loose stools without blood or mucus, and large numbers of Giardia Lamblia were found which rapidly disappeared with the administration of atebrin, gram 0.1 daily for eight days. Coincidentally his stool immediately became normal. In order also to exclude any possibility of there being an amœbic basis to his illness he was later given a full course of emetine.

A month after operation his general condition was excellent, his haemoglobin concentration was 95 per cent., his stool normal and without occult blood, and he was discharged to the United Kingdom fit and well.

Summary

The history of a case of severe hæmorrhage from ascending colon is recounted. Expectant measures proving unsuccessful, operation was undertaken, and the ileo-colic artery was ligated and divided. No other example of this procedure has been discovered after search of the available literature.

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