

liver dulness. Blood was found around the cæcum, in the meso-colon and lower part of the mesentery, at the volvular loop and between the liver and the diaphragm. Gravitation from the volvular loop was the probable explanation of the presence of the blood in the last situation. The stump of the appendix was intact. The bowel was intact, except for the artificial opening into the cæcum. No thrombosis of the mesenteric vessels was discovered except in the small vessels in immediate contact with the gangrenous colon. The mucosa of the cæcum and ascending colon was pale, not much swollen, and presented linear erosions which were, however, not extensive. The mucosa of the volvular loop was intact and showed a slight amount of inflammatory change. No other post-mortem feature of special interest was observed.

In this case it is almost certain that intestinal hæmorrhage occurred the evening following the operation and that the blood was retained in the cæcum and ascending colon in a fairly recent state on account of the inactivity of the bowels and stomach until the bowels were actively moved. There was no history of hæmophilia or other condition that would favor hæmorrhage. The operation performed was the time-honored cuff operation with ligation by silk of the appendix and its mesentery.

From one's recollection of the congested state of the cæcum and the difficulty of isolating the appendix, one cannot but feel that the necessary manipulations may have produced sufficient traumatism to give rise to thrombosis in the congested vessels of the walls of the cæcum, and that this was the determining factor in the early intestinal hæmorrhage which followed. The hæmorrhage into the peritoneal cavity was no doubt a continuation of the process, and the hæmorrhage at the volvular loop was a likely result of constriction of the mesenteric vessels supplying the loop, which at the post-mortem examination was found to be twisted upon itself one and a half times.

The prognosis in such cases as the one related is extremely grave, an average estimate placing the mortality at between sixty and seventy per cent., though this is probably rather a high estimate.

The treatment is essentially medical, and is usually conducted along the lines indicated in the case report. If vascular clotting is the essential causative factor surgical treatment could not avail except perhaps in an occasional case of late hæmorrhage due to infarction and ulceration, but even then, if medical means fail, a fatal termination is most likely to ensue.

417 Bloor St. W., Toronto.

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