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LONG DELAYED SECONDARY HAEMORRHAGE FOLLOWING APPEN- DICECTOMY

BY

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The death rate following and directly attributable to the operation for the removal of a chronically infected appendix is negligible, and there seems to be no reason why it should be anything else. That accidents and misfortunes must from time to time occur is obvious, and as the case here reported is a dramatic example of both, and at the same time appears from a review of the literature to be unique, I feel it is worth recording.

Case Report

A man aged 22 was admitted to a hospital in London on December 18, 1936, with a diagnosis of chronic appendicitis. Through a minute incision a chronically inflamed appendix was successfully removed, and the patient was discharged, apparently cured, on December 28.

On January 16, 1937, nineteen days later, he felt the desire to defaecate, and on doing so passed a considerable quantity of bright red blood, and felt very faint. He was put to bed and seen by his doctor, who ordered rest and quiet for two or three days. No further bowel action occurred until the 20th—that is, twenty-three days after the operation—when he again felt the desire to defaecate, and on doing so passed such a large quantity of blood that he became almost pulseless, and was admitted to the Erith Hospital shortly after. I saw him an hour later, when he was very pale, with a thready pulse of 140 and air hunger. His case presented, in fact, the classical appearance of a grave internal haemorrhage. There was no abdominal pain, and the abdomen moved freely on respiration. Some tenderness was present on deep pressure only, over the sigmoid colon, but no muscle guarding or rigidity. Peristalsis was audible in each quadrant of the abdomen, and there was no suggestion of free fluid in the general peritoneal cavity. A rectal examination was negative, except for the presence of bright blood on the examining finger-stall. I examined him with a sigmoidoscope, but found no cause for bleeding in the rectum or colon, and, further, the blood appeared to be coming from a point above the full length of the sigmoidoscope. The patient was accordingly given large doses of morphine and haemoplastic serum, and preparations were made for a blood transfusion. By daily small doses of morphine, limiting fluids by mouth to bare necessity, and feeding only with concentrated meat extracts in small quantities, he was kept comfortable and in a good condition for eight days without a bowel action. I had at this time made a diagnosis of a pedunculated adenoma somewhere in the colon, and was hoping that his condition would recover sufficiently for a barium enema to be given with a view to localizing the site of haemorrhage.

On January 28, however, thirty-one days after the operation, he suddenly asked for the bed-pan and had another severe haemorrhage, which nearly killed him. A blood transfusion was at once started, and I explored his abdomen through a long right paramedian incision just under one hour from the time of the haemorrhage. Rapid examination of the whole length of the colon showed it to be boggy and full of blood, and no tumour could be felt in the bowel wall. There were a number of recent adhesions round the appendix stump, which appeared to be in a state of more or less active inflammation. The caecum at the site of the stump was very oedematous and inflamed, and contained a mass within the caecal wall. This was opened up without difficulty with the exploring finger, and was found to be an abscess cavity, in the wall of which was a spurting artery of medium size. This was at once ligatured, the abscess cavity swabbed out with half-strength eusol, its opening into the caecum enlarged to ensure adequate drainage into the bowel lumen, and the caecal wall closed by two rows of Lembert sutures. The abdomen was closed without drainage in the usual way.

The patient made an uninterrupted recovery, was discharged three weeks later, and has had no further trouble. He wrote in April saying that he has recently been medically examined and found to be fit and well.

Survey of the Literature

A review of the literature and of the disasters which can overtake a patient following the removal of a chronically inflamed appendix does not reveal such a case so far as I am aware. Both reactionary and secondary haemorrhage after appendicectomy are, however, well described.

Hessert (1906) reports three cases that occurred well within twenty-four hours of operation, and describes in his technique a method of closure of the appendix stump that does not include passing a ligature round the stump, which was, however, invaginated. All three of his cases were associated with massive haemorrhage into the bowel and not apparently into the peritoneal cavity, and it would be safe to assume that the bleeding started from a crushed but unligatured appendix stump and not from the mesentery of the appendix. One of these cases was fatal. Pâtel and Murard (1912) report two fatal cases of haemorrhage from main iliac vessels, but both were classical examples of defective drainage of large abscesses placed in relation to big blood vessels. Auvray (1932) describes an unusual fatal secondary haemorrhage occurring on the eleventh day from the ileo-colic vein, but in this case there were both a localized abscess and general peritonitis.

Fiolle and Figarella (1934) describe two cases in which haemorrhage has occurred along the line of the drainage tube where appendicectomy had been performed during the acute stage. These authors review the literature and consider the possible explanation of these cases. In their opinion the following factors must be taken into consideration: (1) The employment of too strong antiseptics in the cauterization of the stump or in washing out the abscess cavity. (2) The continued spread of infection after operation. (3) Operative trauma in cases where a difficult retrocaecal appendix has been encountered.

That drainage tubes can also play a part is shown by the case of Caraven and Basset, in which the tube was found at necropsy to be lying over an erosion into a main vessel.

Commentary

Reverting to my own case, very few of the foregoing factors can be said to have applied. In the first place, the

operation was performed in a proper manner and the immediate convalescence was normal, and there can be no question, therefore, of the introduction of infection from without at the time of operation. The fact remains, however, that sepsis did subsequently develop in the region of a cleanly closed appendix stump. The following explanation suggests itself to me:

The patient was a well-built muscular man, and the appendix was removed through a minute pararectal incision made some distance from the site of that organ. Now if this had been a difficult retrocaecal appendix—and that seems likely from the previous history—its removal through such a small incision, even under the most excellent anaesthesia, must have presented very considerable mechanical difficulties, and I think it more than probable that a certain amount of pulling about, which would not have been necessary through a more extended approach, occurred, with the result that the tissues in the region of the appendix stump were bruised and their vitality lowered, so that infection from the lumen of the bowel gained entrance through the damaged caecal wall, with the subsequent development of an abscess cavity and erosion of a caecal vessel.

While admitting that great reputations are not infrequently constructed around small incisions, I would submit that the cosmetic result in such cases in no way justifies the turning of what ought to be a comparatively easy operation into a surgical hazard.

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IS IT EVER NECESSARY TO KILL A LIVE BABY? *

BY

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In bringing this subject before you the first question to be asked is, What is a live baby? Do we mean by this a child before viability—that is, before the twenty-eighth week? I do not believe that a child is viable until then, in spite of the stories of infants of 2 lb. living and thriving. I mean to deal in this paper with the destruction of the fertilized ovum at any stage of the pregnancy. The title of the paper may be questioned, and it may be suggested that it should be: "Is it ever necessary to perform craniotomy on a live baby?" I prefer to retain the title chosen, for it emphasizes better the points to be considered.

Before delving into the absolute medical aspects we must consider the ethical question as raised by Aleck Bourne in July, 1938. At the time Mr. Justice Humphreys stated that the law has never been concerned with the ethics of abortion, but only with what is commonly called criminal abortion, and he explained that if a reputable doctor operated with a desire to save a patient's

life, and after consultation with one or more colleagues, the law would never be so stupid as to suggest that he had committed a criminal offence. This fact has been well known for some time. The question as to the safeguarding of a patient's health or life is a difficult one, and in my opinion a wrong argument was raised when it was suggested by one of the lawyers that rheumatism was only dangerous to health, and cancer to life: surely there are many forms of rheumatism which, although not immediately dangerous to life, are sooner or later remotely so. The whole thing depends on the honesty of the doctors.

To come now to really obstetrical problems, it would seem unnecessary at the present stage of scientific knowledge to bring forward a paper with such a title as that chosen, but my excuse for its publication is that the public is apparently ignorant of the advances which have been made.

The First Twenty-eight Weeks of Pregnancy

During this period the problem may arise in various ways. First, I will deal with the toxæmias. Preventive obstetrics has done much to stamp out most of the severe cases, but one still encounters instances, especially those of hyperemesis gravidarum, which test the diagnostic skill of the obstetrician to the greatest extent. Pregnant patients should be seen as soon as possible, and they will not vomit if they are treated in the correct psychological manner; but if the friends of the patient tell her she should surely vomit when pregnant she will do so, and hyperemesis and death may result. Often we encounter the dreadful cases where constant vomiting and collapse are the prominent symptoms. In these cases of hyperemesis jaundice may be present, and a positive Fouchet test and van den Bergh reaction emphasize the dangers, while abundant albuminuria and a high blood pressure point still more to the enemy we are fighting—death. I do not intend to dwell much on the treatment of this condition when it is serious: prevention is the keynote; but when we *do* meet it what must we do? Starvation, glucose, insulin, hormone therapy, gastric lavage, jejunostomy are some of the treatments which can be studied in the textbooks. Termination of the pregnancy is indicated sometimes, but death will supervene in these cases if the induction is left too late. When, if ever, should the pregnancy be terminated? If in spite of thorough and careful treatment for three or four days the Fouchet or van den Bergh reaction is positive, if there is marked albuminuria, if the pulse rate is increasing and its volume is getting weaker, if the patient is getting jaundice, a timely removal will save life if not left too late, and it is my belief that if the patient is so ill that termination of the pregnancy is required and the necessity for it is decided on by a competent obstetrician the ovum is dead. The best way to terminate the pregnancy in a critical case is by either vaginal or abdominal hysterotomy, but if the patient is so located that the doctor does not feel justified in performing this operation he can curette in the first three months, but in the second three months the patient should be transferred to a maternity hospital.

Other toxæmias of pregnancy scarcely ever arise in the early months, but if a renal toxæmia occurs from the twenty-fourth to the twenty-eighth week the patient should be brought to hospital, where with ordinary care it will be possible to carry her on until the child is viable. I believe that it is easy at this period to mistake a toxæmia for a pyelitis, or at least a pyelonephritis, and the greatest care must be taken to make this diagnosis, which can easily be done by clinical and laboratory methods.

* Read before Lincoln Medical Society, February 23, 1939.