

cessive fulness in the lower part and right side with corresponding relative flatness in the upper and left portion.

The abdominal wall was as tense as a drum. There was no liver dullness on percussion. The abdomen was opened immediately by a long vertical incision over the most prominent part of the swelling to the right of the right rectus muscle.

On opening the peritoneum, an extremely large distended bowel of greenish gray color evidently gangrenous presented in the whole length of the wound. There was also a large quantity of foul smelling dark blood-stained serum free in the peritoneal cavity. This coil of large intestine was so distended and apparently so fragile that it was punctured and a large quantity of blackish fluid resembling altered blood evacuated before delivering it from the abdomen.

It was then found to be the sigmoid flexure twisted upon itself at its extremities and was promptly removed. The rectal and colic extremities were invaginated by purse-string suture and further secured by Lambert sutures, and a loop of the transverse colon was brought out through the abdominal wall on the left side and a Paul's tube inserted.

The abdomen was flushed with saline solution, the wounds closed, and although the patient's condition was extremely grave throughout he lived until 3 o'clock the following day, during which time he had no pain nor vomiting nor any symptoms of any kind except great prostration. His death was evidently due to toxæmia which had occurred through the gangrenous bowel before operation. The history would seem to indicate that the vitality of the obstructed bowel had become so lowered by Tuesday morning (36—40 hours before operation) that transudation of contents and secondary symptoms began then.

The sigmoid flexure after removal measured $59\frac{1}{2}$ inches in length. It was impossible in the circumstances to determine its diameter, but I should say that it must have been 5 or 6 inches at least. The extreme length and diameter of the sigmoid in this case was no doubt due to some extent to the mechanical stretching during the period of obstruction. It will be noted that in both the cases operated upon for volvulus of the sigmoid the patients had suffered all their lives from constipation and flatulence, and both had had many attacks which in the light of later experience would seem to have been due to partial or temporary obstruction, and it is not difficult to understand how an exceptionally long and freely movable sigmoid becoming overloaded might assume a position which would cause temporary obstruction.

A considerable number of cases of both the foregoing varieties of elongated sigmoids are reported; but in many of them, measurements are not given and the reports are otherwise incomplete.