

## POSTOPERATIVE MECHANICAL OBSTRUCTION OF THE BOWEL OCCURRING SHORTLY AFTER OPERATIVE PROCEDURE.

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During the last ten years, four cases belonging under the above classification have come under the author's observation. Three of them occurring in his own work, the last case to be recited in the service of his co-worker at the Kings County Hospital, Dr. L. J. J. Commiskey. They have all been proven cases, either by operation or autopsy. In the author's opinion from the study of the symptomatology of these bowel obstruction cases, many go to their graves under the diagnosis of and treatment instituted for the condition called acute dilation of the stomach.

There are three causes to be assigned for the condition. First, direct obstruction due to adhesions and kinking of the gut, a loop being adherent to an adjacent loop, to the parietal peritoneum, to one of the solid organs occupying the abdomen which has been abraded of its peritoneum either through handling or operative work, or to drainage gauze. Second, indirect obstruction through the omentum having formed adhesions and thereby pulling sufficiently upon the colon to cause kinking and obstruction. Third, paralysis. This latter cause is usually spoken

of as non-mechanical, but the author feels that the paralysis of a muscle is a mechanical factor and should be thus exhibited in our literature. For the purpose of illustration and elucidation of the author's ideas on the subject, let us take first a brief resume of the symptoms presented in acute dilation of the stomach as exemplified in the very excellent monograph of Dr. J. C. MacEvitt, read before the Brooklyn Surgical Society in May, 1906. We find as follows: "Abdominal distension more marked in the upper zone, restlessness and irritability followed by vomiting which is characteristic, being large in quantity and projectile. Now take up the symptoms of obstruction. Here you find the distension is general, pain of a colicky character due to the increased peristalsis above the point of obstruction, vomiting first of the contents of the stomach and later, if the obstruction is not relieved, the contents of the upper small intestines. Both pulse and respiration are increased in frequency, the amount of increase depending upon the degree of distension, it is sometimes so great as to cause death of the case even

before the vomiting has occurred."

Reviewing the symptom complex, I admit that it is not easy to arrive at an absolute and definite conclusion, but since acute dilation has been so much before us in the literature the author feels that we have not been as free as we might otherwise have been, to open the abdomen secondarily for the relief of troublesome adhesions.

Before the time of the recognition of acute dilation of the stomach as a distinct entity most of these cases died as cases of peritonitis; still others were classified by Lewis A. Stimson of New York as intestine-peritoneal-septicaemia. In others we found at operation or autopsy a paralysis and flattening of a portion of gut either large or small and ranging in length from a few inches to a number of feet with a corresponding distension above; this may occur in separate portions of the gut, that is, such a lesion may be multiple. Another class of cases are only partially obstructed by intestinal adhesions, but the symptomatology in all of these cases so closely resembles that of acute dilation of the stomach that they are so treated until death occurs or until further operative measures are useless.

Following are brief reports of the author's cases.

Case No. I. Mrs. E. F., admitted to the author's service at the Long Island College Hospital July 18th, 1901. Diagnosis, endometritis, bilateral pyosalpinx. Operation July 19th, 1901 uterus was dilated and curetted, and a laparotomy was done, both tubes and ovaries being removed. Two small fibroids, subperitoneal, on the posterior surface of the fundus were removed by incision and enucleation, the incision being closed with plain catgut and the uterus being suspended. The patient's postoperative

nausea continued longer than usual; the distension of the abdomen and the vomiting on the morning of July 22nd, 1901 was distinctly fecal in character. The indications here were absolute, the incision was opened and adhesions with right-angled kinking of a portion of the small intestine adherent to the posterior surface of the uterus at the site of the incision for the removal of one of the fibroids, with distension above and collapse below. This quickly closed. The patient had an uninterrupted recovery.

Case No. II. E. R., Female, aged 27, who had had two stillbirths with mutilation of the babies from forceps, admitted to my service at the Kings County Hospital early in labor Sept. 2nd, 1906. All pelvic measurements were slightly under the normal and from the previous history it was decided to do a Caesarian section. Two days later I saw the patient early in the morning. There was general distension of the abdomen and there had been some vomiting. I prescribed catharsis and enemata, and I left the hospital feeling that I had the misfortune to have developed a postoperative peritonitis in this case. The therapeutic measures had no result, and the patient died suddenly at 9 p. m., that night. Autopsy in this case showed that the omentum was caught under one of my through and through silk-worm gut sutures, pulling upon the colon sufficiently to cause kinking and obstruction.

Case No. III. Mrs. L. C., colored, referred to my service at the Swedish Hospital on June 23d, 1911, by Dr. William Pfeiffer with the following diagnosis: Pregnancy with placenta previa at about the fifth month in a uterus very much enlarged by fibroids. She had had a history of severe hemorrhage, dating back several

weeks. It was decided to do a hysterectomy. On opening the abdomen some of the veins in the pelvis were found as large as a finger. A supravaginal hysterectomy was done as rapidly as possible and the patient returned to bed in good condition. Distension of the abdomen and vomiting with a rise of temperature began within the first 24 hours after the operation. This patient had stomach washing, eserine and strychnine and enemata. Two movements of the bowels were secured, flatus was passed, but the distension increased rapidly, and the patient died at the end of the second 48 hours after the operation, with the temperature registering 105.2-5th. Autopsy in this case disclosed an adhesion of a portion of the small gut with right-angled kinking (to the line of union of the anterior and posterior flaps of peritoneum), with distension above and collapse of the gut below. The movements of the bowels and passage of flatus had, of course, come from below the area of obstruction. An early appreciation of the conditions existing and their relief by early operation would have saved the patient.

Case No. IV. was a Caesarian done by Dr. L. J. J. Commiskey at the Kings County Hospital. Twenty-four hours postoperative the patient was vomiting with abdominal distension, rise of pulse

rate, with the vomiting suspicious of being fecal. In this case there was no doubt as to the diagnosis and the primary wound was reopened. A portion of the small gut was found adherent to the lower end of the uterine incision with marked angulation of the gut. Adhesions were relieved, but as the distension above did not seem to be relieved, enterotomy was done. Patient was returned to bed. Patient improved, but later nutrition failed due to the fact that the enterotomy was high up in the gut. The enterotomy wound was closed by Dr. J. B. Bogart and the patient recovered.

From a study of the above cases the author feels that he is justified in making the following appeal, where the diagnosis between these two conditions, the acute dilation of the stomach and obstruction of the bowels, is doubtful. For the first, only a short trial of the treatment as directed towards dilation, i. e., stomach washing, posture and the administration of eserine and strychnine and enemata and then the relief of the probable adhesions by operative measures through the primary wound or the stasis of the paralytic form of the obstruction by enterotomy as was carried out in Dr. Commiskey's case.

\*Read before the Brooklyn Gynecological Society at a stated meeting.