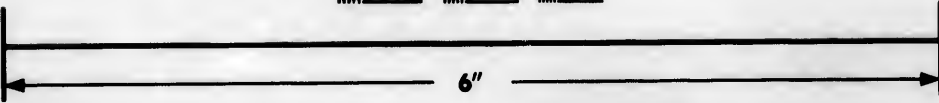
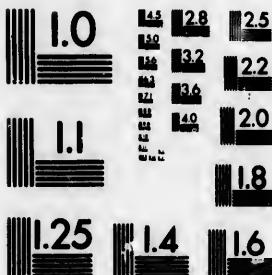


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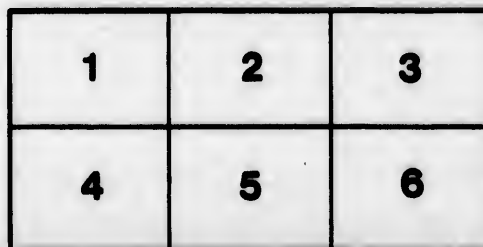
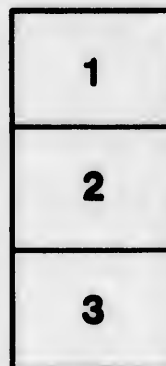
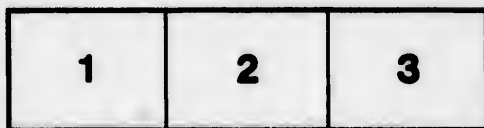
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INTESTINAL OBSTRUCTION FROM GALL-STONE.

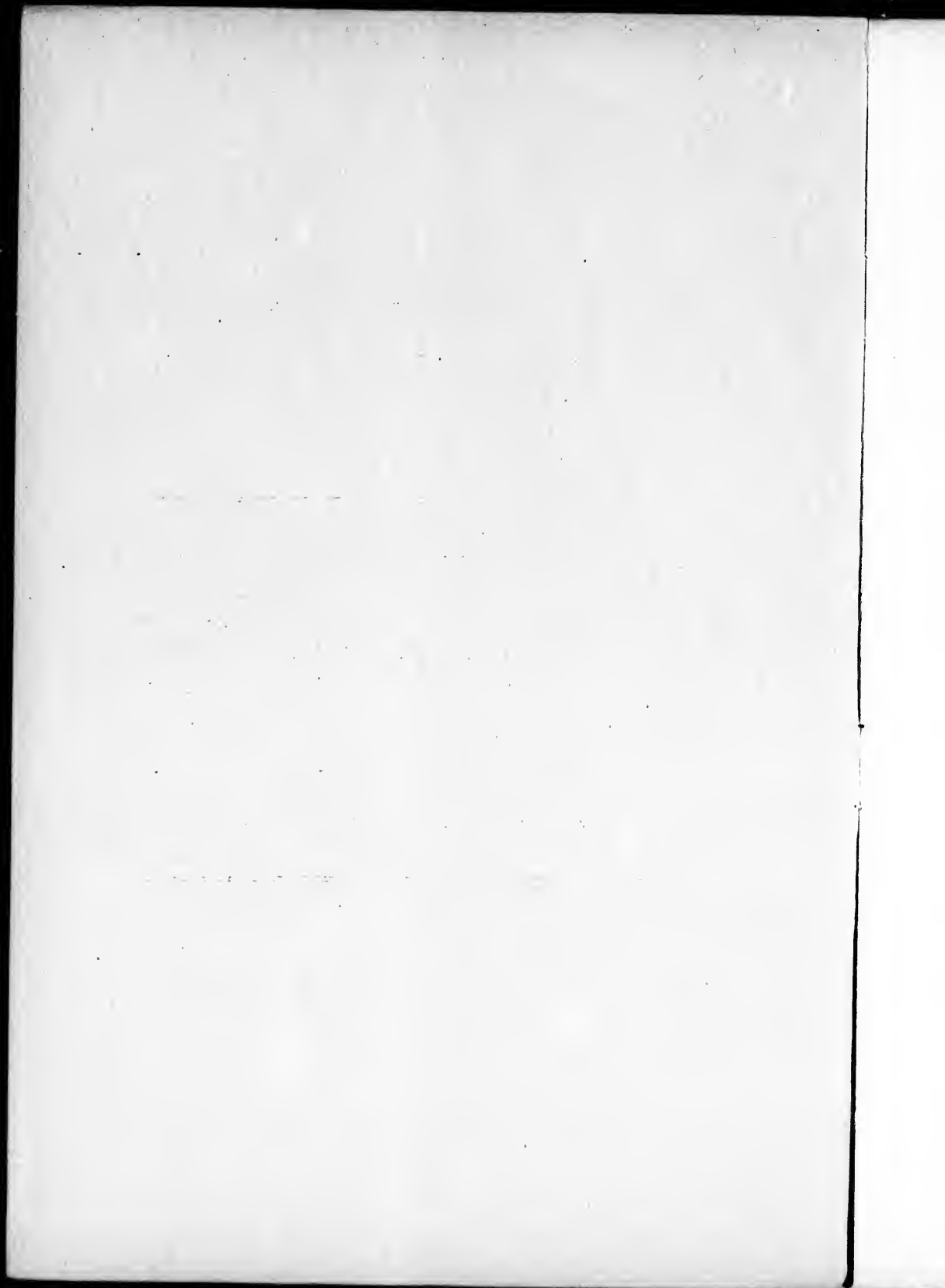
BY

GEORGE E. ARMSTRONG, M.D.,

Associate Professor of Clinical Surgery, McGill University; Surgeon to the Montreal
General Hospital; Attending Surgeon to the Western Hospital, Montreal;
Consulting Surgeon to the Protestant Hospital for the Insane, Verdun.

(Reprinted from the Montreal Medical Journal, May, 1898.)





Clinical Reports.

INTESTINAL OBSTRUCTION FROM GALL-STONE.¹

BY

GEORGE E. ARMSTRONG, M.D.

Associate Professor of Clinical Surgery, McGill University; Surgeon to the Montreal General Hospital; Attending Surgeon to the Western Hospital, Montreal; Consulting Surgeon to the Protestant Hospital for the Insane, Verdun.

I saw Mrs. A., 43 years of age, married, multipara, for the first time on Sunday, 10th April, 1898. She complained of nausea and vomiting, abdominal pain and constipation. Her previous health had not been good. At 18 years of age she suffered from acute inflammatory rheumatism, with endocarditis, resulting in mitral valve disease. For many years she had frequent attacks of hæmoptysis. She has had four living and four still-born children.

In the winter of 1896-7 she suffered from an attack of what her family physician diagnosed as appendicitis. At this time she was confined to bed for three months. She tells me, however, that the pain and tenderness during this attack were high up, more in the region of the gall-bladder than of the appendix vermiformis. Since then she has never been free from soreness in the right hypocondrium, aggravated by exercise and cold.

The present illness began with vomiting on the previous Friday, and had kept up almost continuously during Friday night and Saturday and Saturday night. She had taken of her own accord a dose of salts and two enemas of soap-suds, without much effect, as only one small stool had passed after the first enema. Notwithstanding medical treatment, and the stopping of food by the mouth, the vomiting continued during Monday and Tuesday. On Tuesday evening her general condition, which up to this time had been good, began to fail. The pulse became more rapid, the temperature rose to 100°F., the abdomen was perceptibly distended and there developed tympanies, with general abdominal tenderness and a most anxious expression of countenance. The vomited matter was of a green bilious character, and very abundant. At no time had it any fæcal odor.

I decided that I had to deal with an intestinal obstruction; that I had already done all that could be done by medical treatment, that my patient was entering upon a condition in which any operative measur

¹ Read before the Montreal Medico-Chirurgical Society, April 20, 1898.

would be hazardous, and that an exploratory incision, and subsequent treatment *secundum artem* of the condition found, would give the best chance of bringing about a relief of the symptoms.

I had her removed to the Montreal General Hospital and operated on the evening of Tuesday, the 12th April, 100 hours after the onset of pain and vomiting. Dr. Shepherd very kindly gave me his assistance.

I opened the abdomen in the median line, below the umbilicus. Distended and collapsed small bowel came immediately into view. After following the collapsed bowel for a short distance, the portion containing the stone came up from the region of the pelvis on the left side. After emptying the bowel by pressure, and protecting the field by gauze pads, an assistant grasped it on each side and I removed the stone through an incision in the long axis of the gut. The opening in the bowel was subsequently closed by a double row of continuous sutures.

The green bilious vomiting continued for 72 hours after the operation. Extract of belladonna was given continuously every four hours for a week to overcome the dilated condition of the bowel above the obstruction. The bowels did not move until the fourth day after the operation, notwithstanding the frequent administration of copious enemata and occasional salines. The patient is now quite well, eating heartily and passing a well formed stool each day.

I do not know that it is possible to differentiate obstruction by a gall-stone from that due to bands or a volvulus or internal hernia. A history of cholelithiasis would be very suggestive, however. In the present instance the history was of a previous attack of appendicitis. There had never been any jaundice observed. One would rather have expected to find strangulation by bands.

In a case of intestinal obstruction occurring subsequent to a definite history of recurring attacks of hepatic colic rendering it probable that gall-stone might be a likely cause, it would be a nice question to decide when to operate. The mortality in gall-stone obstruction, following the medical and expectant plan of treatment is, according to Mayo Robson, about 52 per cent., and if surgeons have not been able in the past to show a larger percentage of recoveries, it is probably because operations have been too long postponed. Operations done as a *dernier resort* will always be followed by a large death rate. It is remarkable what small stones have caused fatal obstruction, as shown by specimens in the London Hospitals. On the other hand some very large stones have been successfully passed. I should say that in every case of intestinal obstruction from gall-stone or any other un-

discoverable cause, the attendant was in duty bound to advise an exploratory incision as soon as the patient's general condition began to fail, and under no circumstances should a patient be allowed to drift along until even the smallest operative procedure would necessarily be attended by very great danger.

These large stones do not pass into the gut through the common duct, but ulcerate their way through from the gall-bladder into the duodenum or colon after an adhesive inflammation has united the two. I operated upon a case some years ago where the gall-bladder had become adherent to the colon underneath. The adhesions had not been very strong, however, as several stones were found lying free in the peritoneal cavity just beside the opening between the gall-bladder and colon.

Although intestinal obstruction from gall-stone is generally caused by the stone blocking the lumen of the bowel, yet there are other ways in which the same result is brought about. There may be lighted up a localized peritonitis, leading to obstruction from paralysis of the intestinal wall. Again, obstruction may follow from bands, and fistulæ, the result of gall-stone ulceration.

Lastly, one or two cases have been successfully operated upon where the obstruction was found to be due to volvulus resulting from the violent irritation and irregular peristalsis due to the presence of a gall-stone.

Mayo Robson speaks highly of the value of extract of belladonna given in doses of gr. $\frac{1}{4}$ every four hours. This drug may be of value in conjunction with morphia, in favouring the passage of a stone, and again after operation, in aiding the restoration of function in a bowel that has been for some time over distended.

