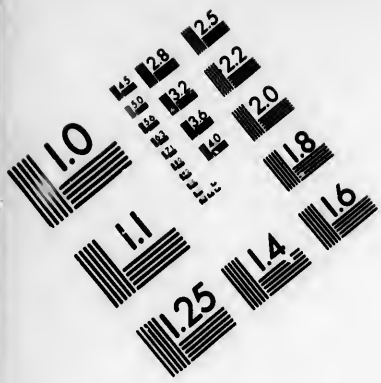


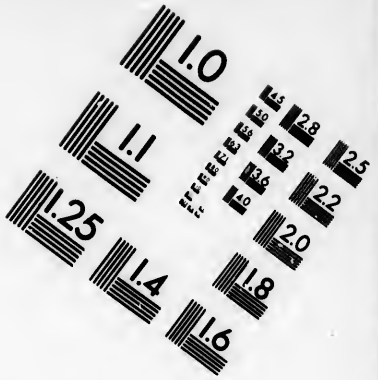
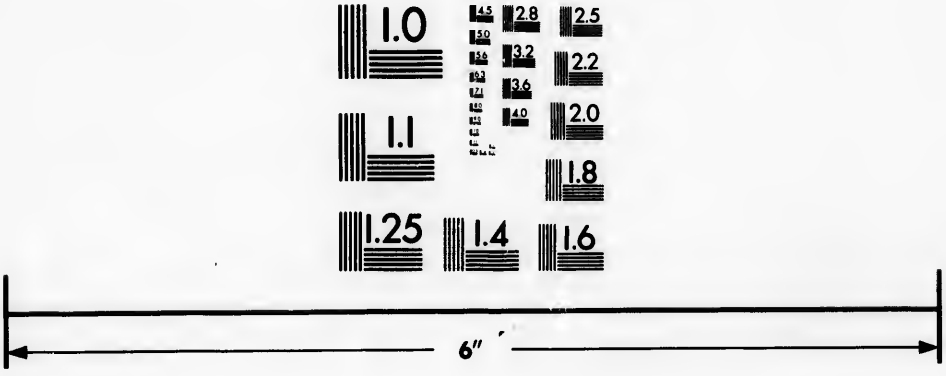
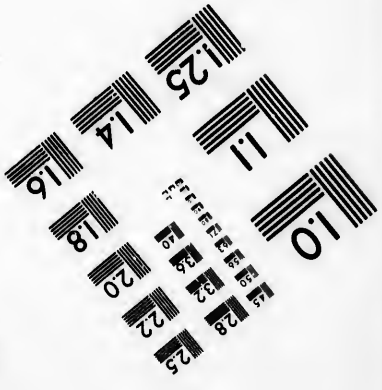


IMAGE EVALUATION TEST TARGET (MT-3)





Photographic Sciences Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

Technical and Bibliographic Notes/Notes techniques et bibliographiques

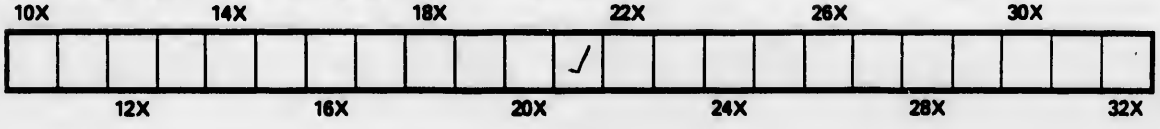
The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

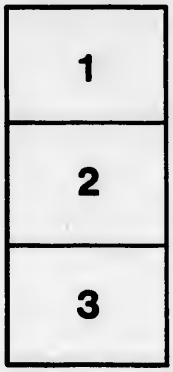
L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

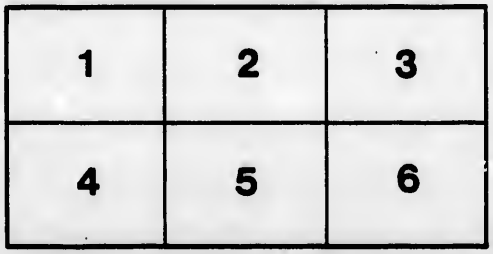
- ☐ Coloured covers/ Couverture de couleur
- ☐ Covers damaged/ Couverture endommagée
- ☐ Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée
- ☐ Cover title missing/ Le titre de couverture manque
- ☐ Coloured maps/ Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur
- ☐ Bound with other material/ Relié avec d'autres documents
- ☐ Tight binding may cause shadows or distortion along interior margin/ La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- ☐ Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- ☐ Additional comments:/ Commentaires supplémentaires:

- ☐ Coloured pages/ Pages de couleur
- ☐ Pages damaged/ Pages endommagées
- ☐ Pages restored and/or laminated/ Pages restaurées et/ou pelliculées
- ☑ Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- ☐ Pages detached/ Pages détachées
- ☑ Showthrough/ Transparence
- ☐ Quality of print varies/ Qualité inégale de l'impression
- ☐ Includes supplementary material/ Comprend du matériel supplémentaire
- ☐ Only edition available/ Seule édition disponible
- ☐ Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/ Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.







Ap. Shepherd, F. J.

REPRINTED FROM THE "MONTREAL MEDICAL JOURNAL," FEB., 1890.

H. J. Burkett.

APPENDICITIS—LAPAROTOMY—RECOVERY.

By Francis J. Shepherd, M.D.,
Surgeon to the Montreal General Hospital.

WITH REMARKS ON CASE BY DR. R. L. MACDONNELL.

The following notes of the case have been furnished me by Dr. R. L. MacDonnell, under whose care the patient was up to the time of operation :—

"Julia B., æt. 20, was admitted into the medical wards of the Montreal General Hospital on September 13th, 1889, complaining of severe pain in the abdomen. For the last twelve months she has frequently suffered from occasional pain and tenderness in the right iliac region, but the first really severe attack which resembled the present one occurred five months ago, and was very severe. She remained in bed for three weeks, and thought that recovery was complete, but after being up three weeks a second attack occurred, which was more severe than the first. She was taken to the Notre Dame Hospital, where she remained some three or four weeks, leaving the institution some time in June. Since then she has never been free from some degree of pain in the right iliac fossa. The present attack began nine days ago. She awoke in the night with a very severe pain in the right side of the abdomen, which was almost immediately followed by vomiting. The pain next day was more intense. Five days before entering hospital she had a severe rigor. She was under treatment evidently by opium until day of admission.

At the time of visit she presented the following appearance: A strong, muscular girl, with bright complexion; dorsal decubitus; legs drawn up; face pinched and expressive of the greatest suffering; great tenderness and pain over right iliac fossa, which extends towards the right breast and up the back of the chest; pulse 120, small and hard; respirations hurried and shallow (30); temperature, morning 99.4°, evening 100.8°. The bowels have not moved for several days. On admission an enema had been administered, opium was given, and fomentations applied.

Next day the condition was much worse. Pain and tenderness general over the whole abdomen. Dr. Shepherd was now called in."

I saw the patient, at Dr. MacDonnell's request, at mid-day, September 14th, 1889. She was suffering from well-marked symptoms of appendicitis. We both decided it was a case for operation, and without further loss of time the patient was put under ether. On examination, no tumor could be made out in the right iliac fossa, but there was a distinct sense of resistance. After thoroughly cleansing the abdominal walls, an incision was made in the right iliac region some four inches in length. The incision made was the usual curved one, the centre being a little internal to the anterior superior spinous process of the ilium. After cutting through the abdominal wall, the peritoneum could not be distinguished, but a mass of inflammatory tissue and omentum appeared; this was carefully pulled aside, and in doing so a small stinking abscess containing a few drachms of pus was evacuated. The appendix was now searched for, and was somewhat difficult to find. The first structures that came into view were some coils of small intestine and the right Fallopian tube. After some little search, which was complicated by the condition of the parts, the appendix was found, somewhat larger than normal, coiled up beneath the cæcum and imbedded in a mass of inflammatory tissue. Cautiously separating it preparatory to applying a ligature, an abscess behind the cæcum containing several ounces of stinking pus was evacuated, a portion of which escaped into the general peritoneal cavity. On

examining the appendix, quite close to its junction with the cæcum a gangrenous ulcer was seen, which almost severed the appendix from the bowel. The appendix was with difficulty ligated above the ulcer, a piece of the cæcum being pinched up to make the ligature hold; it was then removed at the site of the ulcer. The cavity of the peritoneum was now washed out with boiled water and the wound closed, except at the lower end, through which was introduced a large rubber tube to the bottom of the abscess cavity. Dressing consisted of iodoform and cotton wool, held in place by a couple of strips of rubber plaster.

After the operation the patient had a very restless night, with considerable vomiting and pain. Next day the dressings were changed, being soaked through with the oozing of a bloody serum, and also some bloody serum was withdrawn from the wound by means of a syringe having a piece of tubing attached. Two days after the operation the bowels moved freely. At the end of a week patient was doing well, had very little pain, and no rise of temperature. The discharge from the wound had a distinctly fœcal odor, and was yet in some quantity. The stitches were taken out, and near where the drainage tube was the wound gaped considerably, so it was packed with sticky iodoform gauze from the bottom.

From this time the case progressed favorably, a slough the size of a five-cent piece coming away at the end of the second week. The patient was placed on plain full diet at the end of the fourth week, and was then seized with severe colicky pains without rise of temperature. On enquiry it was found that she was constipated, so salines were ordered, but these not relieving the pain she was placed on milk diet, which in a couple of days restored her to her normal condition. Patient was discharged from hospital on the 4th of November; she still had a small sinus at the site of the drainage-tube. I saw her on Wednesday, December 18th, and she had then been back to her work for three weeks; she looked strong and fat, and said she had not the slightest pain. There was still a small shallow sinus at the lower end of the abdominal wound.

In laparotomy for appendicitis the lateral incision is much the

most convenient, especially in cases where the diagnosis is as plain as in the one just related; besides being the most suitable for examining the condition of the cæcum and appendix, the lateral incision is much the most favorable for after drainage. Some surgeons advise that in excision of the appendix the peritoneum should be dissected away and sewed over the end of the cut tube. I see no special advantage in this procedure, and, besides, it is only practicable in a few cases; when the peritoneum is so altered by inflammatory action, as is usually the case, no such plan could be carried out. In this case the appendix was removed so close up to the cæcum that even if the peritoneum had been normal a flap of it could not have been removed. Omental grafting, as recommended by Dr. Senn in wounds of the intestines, might be a useful and practicable proceeding. The situation of the ulcer in this case was unusual; it is generally situated at some distance from the cæcal junction, most frequently near the apex. No concretion was found.

This case was successful because early operation was performed and symptoms of general peritonitis were not waited for. In fact, to treat such cases on the expectant plan is obsolete and bad surgery; a very few may get well, but the great majority will perish, and perish rapidly. Again, this case, from its history of repeated previous attacks and its not very rapid course, was one which was eminently favorable to operation. Where the appendix is curled up beneath the cæcum, the diseased area is usually separated from the general peritoneal cavity by a boundary of inflammatory tissue, and this is the time operation should be undertaken. Should the disease go on, the abscess may either present in the iliac fossa, rupture into the peritoneal cavity, or, if the pus be pent up, it may cause death by septicæmia. The cases which have a previous history of attacks of appendicitis should be operated on without hesitation early; the danger of early operation is not great, and the patient is permanently relieved from a condition which will, sooner or later, cause his death. Such cases are advised to be operated on between the attacks and the appendix removed. Mr. Treves of London and Dr. McBurney of New York have

successfully operated in such cases. These cases differ much from those others where the appendix hangs freely over the brim of the pelvis and perforation occurs almost without previous warning, and is not preceded by a limiting inflammation. In such cases there is a sudden lighting up of a general peritonitis of a most virulent type, which in spite of any operation rapidly proceeds to a fatal termination. I have operated on several such cases always with the same result. Death has not been averted by the operation, but pain and vomiting have been relieved.

There is no doubt in my mind that the degree and virulence of the inflammation of the peritoneum caused by perforation of the appendix varies considerably in different cases, depending on the condition of the individual and the quality of the poisonous matter extruded from the perforated appendix. I believe in some cases operation, even if performed at a very early stage, would be of no avail. Those cases where an abscess has burst into the peritoneal cavity, unless operation be *immediately* performed, are always fatal. A general suppurative peritonitis is lighted up—no amount of washing will cleanse the many nooks and corners of the peritoneal cavity from its infective material.

Remarks by Dr. MacDonnell.—Did the prognosis warrant an operation so formidable as laparotomy? (1) There were three distinct attacks of pain in the right iliac region, each worse than the preceding one. (2) The suddenness of the onset is characteristic of disease of the appendix. Sudden, severe abdominal pain was present in 216 out of 287 cases collected by Dr. Fitz of Boston (84¼ per cent.) (3) In the intervals between the attacks of acute pain the patient still suffered, though not severely. It would therefore be unlikely that even if the present acute symptoms were to pass off she would regain her health. (4) The symptoms pointed to a change from a local to a general peritonitis, though after operation there were no indications of general peritonitis observed. Appendicular peritonitis has a special tendency to become general, and when general the result is almost invariably fatal. I therefore felt that in handing my patient over to the surgeons I was giving her the best chance for life which circumstances afforded.