

dix was cut off near the cæcum and its peritoneal surfaces rolled together as well as the brittle condition of the stump would permit and fixed by a continuous suture of fine catgut. Drainage for a few days. The patient left town in just two weeks, and remained well at last accounts several months after operation. I have said that the last case may seem to be an exception in a group of cases of purulent peritonitis, but when it is remembered that the operation was done in forty-eight hours from the first pain, and that a perforated, intensely inflamed, and even gangrenous appendix lay almost free in the abdominal cavity, I think no one can doubt that in forty-eight hours more we should have had an abundance of adhesions and pus in place of simple redness and turbid serum.

Clinically and therapeutically these cases require a slightly different grouping, that of Dr. Worcester falling into the second group. The distinctive features of the first group are the gradual development in the right inguinal region of a hard mass or tumor, during a week or more of fever, pain, etc., and which marks the pointing of an abscess. The mass is dull on percussion, though there may be an obscure and deep tympany. It is evidently in contact with the abdominal walls, and is to be distinguished from a deep globular swelling which forms in still milder cases, but which does not reach the surface and which undergoes resolution. The unmistakable, though not urgent, indication is for incision and drainage. The second group is characterized by more intense and persistent pain limited to the right inguinal region at first, but soon spreading more or less through the abdomen and by the other signs of general peritonitis, especially tympany and distention. Whether this state of things develops rapidly from the very beginning of the case or supervenes later upon a mild attack, the lesson of these cases I think is that laparotomy should be promptly done, the perforated, inflamed appendix removed, together with any other offending substance which can be found. The indication is imperative and urgent, and every hour's delay is dangerous.

Had it been early enough heeded in the four fatal cases of this group, I fully believe the result would have been more favorable. In two of them I thought at the time that the operation was reasonably early—the fourth day in one, and the third day in the other, but the result proved it otherwise. The gratifying issue of the case operated upon within forty-eight hours strongly corroborates the above inference. Here no time was lost in waiting for peritonitis, the almost uncontrollable pain, with continual fever, seeming to us to justify extreme measures. I think the relentless and morphia-defying pain often accompanying peritoneal perforations as well as the early stage of purulent inflammation of serous membranes has not been ranked as high as it should have been as a pathognomonic symptom and a therapeutic indication.

Finally, I shall hazard the expression of a belief which I certainly entertain that if every case, without exception, of undoubted appendicitis—and the diagnosis is seldom doubtful—were treated on the second, or at latest the third, day of persistent symptoms by the removal of the appendix and its escaped contents if possible, we should avert in the aggregate a vast amount of pain, expense, and loss

of time from our patients, and we should save many more lives than we do now. True, the majority of cases recover. How many of them, however, do so after protracted illness and with serious disability and great likelihood of recurrence. How many of them would have recovered much more speedily and permanently after operation no one can say. I believe nearly all.

I know the time is not ripe for taking this stand in practice, but I believe it is rapidly ripening.

Clinical Department.

THREE CASES OF PERITYPHLITIS; WITH RECOVERY.¹

BY WILLIAM A. DUNN, M.D.

IN presenting the following cases of perityphlitis I am not unmindful of the fact that in their treatment they bear a rather unusual contrast to the ever-increasing report of cases of typhlitis, appendicitis, and other important complications of the intestinal canal and its adjuncts. Without a recourse to laparotomy, recoveries from inflammation of the cæcum and its surrounding parts must certainly be not only a source of gratification, but also an earnest incentive for persevering effort to those whom the *cacoethes operandi* has not possessed, and in those cases in which an operation is not permitted. *Apropos* of the numerous reports of laparotomies with which the Medical Journals have teemed for a certain recent period, the question arises, Has medical fashion concentrated the energies of its votaries on laparotomy as they formerly affected an operation on every inflamed cervix which could be distorted into a laceration? Shall we have discovered, as in operations for lacerations of the cervix, that the desire to have performed laparotomy may have stimulated the medical attendant too hastily to his decision and may have blinded him to the probable efficacy of other than surgical means for recovery? In these preliminary remarks I refer particularly to the laparotomies which are performed in some cases too early and without carefully weighing the probable curative processes of nature, and in other cases too late, as in the four cases of perforating typhoid ulcer reported some time ago, with a fatal result in each case. The pronounced successes reported by Dr. W. T. Bull,² of New York, the compilation by Arthur E. J. Barker, F.R.C.S.,³ of the laparotomies performed by many of the most celebrated surgeons abroad, and the successes attained by many of our local surgeons attest the efficacy of the operation, yet all cases of perityphlitis do not demand an operation. Flint, Jackson, and others have reported cases of perityphlitis which have ended favorably without surgical interference. It is a mistake to suppose that perityphlitis is necessarily associated with perforation. Flint says that he has "not met with perforation followed by either general peritonitis or fecal abscess in a case of acute inflammation of the cæcum." In view of this quotation from Dr.

¹ Read before the Boston Society for Medical Observation, January 7, 1889.

² Medical News, vol. III. No. 13.

³ London Lancet, No. vi. of vol. II., 1888, p. 262.

Flint it must be inferred that either the type of this disease of the cæcum has changed since his day, or that we do not apply similar remedies, or that there is not the pressing necessity for the operation of laparotomy for perityphlitis and kindred troubles which impresses a certain portion of the surgical world. In reference to laparotomy in this connection, Dr. Joseph Ransohoff, of Cincinnati, made the following remark at the late meeting of the American Surgical Association at Washington:—

"There are two classes of perityphlitis. In one there is a distinct tumor, and in these early operation is by no means indicated. In these cases adhesions have formed, and there is a natural tendency to cure. In these cases the abscess finally perforates the abdominal wall, or is relieved by incision. The second class is that in which the symptoms of perforation develop suddenly; in these cases the incision should be median."

A brief report of the cases operated upon was then given and the following conclusions presented:—

Our present knowledge justifies the statement that both the cæcum and appendix may be the starting-point of an inflammation spreading to the peritoneum or to the peritoneum and cellular tissue of the iliac fossa, constituting a complicated lesion which for convenience' sake we may call "perityphlitis." This may be, in its clinical course, resolving or suppurative; each marked by definite symptoms in some cases, in others difficult to recognize.

Needle exploration is a justifiable and desirable method of diagnosis, though attended by some risks. These may be reduced to a minimum if care be taken to reserve the practice for cases in which the symptoms have lasted several days and in which a distinct indication, "tumor," can be made out.

Suppurative perityphlitis may be a spreading or limited (circumscribed) perityphlitis. Both begin with the same set of symptoms, and it is important to discriminate between them in the first twenty-four or forty-eight hours, or even on the third day.

The presence of any local or constitutional signs of general peritonitis justifies the diagnosis of a spreading or generalization, and calls for the performance of laparotomy and the repair of the lesions found.

The absence of these signs or their strict localization warrants delay of a varying length. Any time after a week the abscess may be opened by an incision which must reach the pus, whether it be extraperitoneal or intraperitoneal.

CASE I. Nov. 12, 1880. D. W., aged twenty-eight, of sedentary habits, thirty hours after a liberal indulgence in various indigestible foods, complained of a severe chill, which was followed by high febrile movement, vomiting, diarrhoea, and pain in the right iliac region. The patient was seen at 5 P.M.; decubitus dorsal with flexed knees. There was intense pain in the right side at the iliac region, which was keenly sensitive to pressure; nausea present; pulse bounding, full, strong and 110, temperature 103°. An examination revealed a prominent abdomen, with resonance and freedom from

pain everywhere except in the region of the cæcum, where there was a distinct tumor as large as a man's fist, in which the hardness and pain became distinctly lessened, radiating from the centre of the mass towards its margin. A subcutaneous injection of morphine, $\frac{1}{4}$ grain, was given, which was repeated, and followed by suppositories of $\frac{1}{4}$ grain every hour, after enemata of oil and warm water had been given without the desired effect. Ice and champagne were administered for the thirst and vomiting. Blisters and afterwards flaxseed meal poultices were applied to the abdomen. There had been no constipation previous to the present attack.

November 13th. Very restless, pain less, nausea. Tumor less tender, but unchanged in other features. Pulse 102, temperature 101.6°. No special tympanitis; legs flexed. Treatment continued. A tube was inserted as high as the sigmoid flexure. A slight amount of flatus came, with no relief. For several days the patient presented very few new features. The vomiting disappeared, the nausea gradually became less, the temperature fell to 99½° and the pulse to 88 on the sixth day. The pain gradually diminished as the tumor in the right iliac region became less. Enemata of warm water and oil were administered daily with slight results.

On the 10th day the temperature was 99°, pulse 90, the tongue had begun to present moist and uncoated sides and tip, and, although the swelling in the right side could yet be plainly distinguished, it was not so distinctly circumscribed. There was less tenderness on pressure, and there were very encouraging indications toward resolution. The legs were no longer flexed, and micturition, which had been painful during the first few days of his illness, was now free and painless.

November 29th. A slight swelling yet exists in the right iliac region; the tenderness has diminished until at present it exists to a slight degree; temperature 99°, pulse 84; liquid diet. He moves in bed with no discomfort. There is no pain except on pressure.

December 5th. Temperature 98.5°, pulse 80. There is no swelling distinguishable, tenderness exists only on deep pressure, tongue almost clean. Diet directed so that there will be as little fecal residue as possible.

December 12th. Apparently well. During the progress of the disease the probable necessity for an operation was continually considered. In the absence of pressing indications, conservatism was warranted and rewarded with a satisfactory result.

CASE II. presented symptoms so similar to those just related that I will report the history without detail.

J. S. had been a dyspeptic for three years previous to April 20, 1888, when the present illness appeared.

Twenty-four hours previous to my visit he had complained of intense pain, tenderness, and swelling in the right iliac region over the cæcum. When I saw him his facial expression indicated severe pain and anxiety. His legs were flexed, decubitus dorsal. Vomiting had persisted for twelve hours. Pulse was full, bounding, and 108, temperature 102°. There was marked tenderness on

pressure over a hard, swollen, oval mass between three and four inches in diameter. The treatment mentioned in the first case followed with very little variation. For the first three days the temperature varied in the morning from 101.3°–103.8°, and the pulse from 100 to 116. There was painful micturition and occasional nausea. After the third day the swelling became less resistant, with a diminution of the pain and tenderness. These symptoms gradually became less and less pronounced, the tongue became less coated, and on the fifteenth day almost every indication of the caecal swelling and attendant symptoms had disappeared. At the end of three weeks the ordinary diet was allowed and the faeces had become natural.

CASE III. J. M. had been complaining of a moderate amount of pain in the right iliac region for a week before April 30th, when I was called. He had been attended by a physician who was obliged to leave town.

When I saw him he was perspiring profusely; pulse 128, temperature 103.5. His facial expression denoted great agony. Decubitus dorsal. Abdomen was swollen and very tympanitic and tender. There was marked tenderness on pressure over the region of the caecum, in which a hard, globular mass about the size of a medium-sized orange could be detected. Although there was a moderate amount of pain over the tympanitic abdomen, it was slight when compared with the pain at the iliac region. I feared a perforation, and advised an operation, which was positively refused. Although my prognosis was very discouraging, I determined to persevere, and to give the patient the benefit of the doubt. Digitalis, minims ten, and carbonate of ammonia, grains five, were administered with brandy, one ounce, every two hours. A subcutaneous injection of sulph. morph., $\frac{1}{4}$ of a grain, was given and repeated. An enema of spirits of turpentine and sweet oil partially relieved the tympanitis. There was no vomiting, although nausea had persisted for several days; thin poultices were applied to the abdomen.

May 1st. There was very slight improvement in the patient's condition. The enema of turpentine and oil was repeated with some relief. The treatment of the preceding day was repeated.

May 2nd. The pulse was stronger, more resistant, and had fallen to 108. Temperature 102°. The tympanitis had greatly diminished, the nausea was less, there had been two loose discharges of faeces from the bowels. The caecal tumor appeared to be about one-quarter less in size than on April 28th, and somewhat less tender. The patient could move his legs and straighten them with less discomfort than on the previous day.

After May 4th the patient progressed appreciably every day. The caecal swelling became less tense, and the pain and tenderness gradually diminished. Micturition, which had been painful since April 27th, became easier.

On May 7th pulse was 90. Temperature 99.5°. The swelling had diminished at its densest portion at least one-half, the pain and tenderness were slight in comparison with his previous suffering.

On the 14th May the swelling had almost completely disappeared. The pain and tenderness were not noticeable. All of the symptoms denoted

rapid convalescence. There had been one slight semi-solid discharge from the bowels. The tongue was cleansing. Decubitus was on either side at will. The legs were not flexed. Temperature 99°, pulse 82.

May 28th the swelling had wholly disappeared, the pulse was 80; temperature normal; tongue was moist and clean; the appetite had returned; and there had been for the past five days normal fecal discharges. There was no tenderness of any part of the bowels.

On May 30th I considered the patient practically well.

A CASE OF APPENDICITIS: WITH AUTOPSY.

BY WILLIAM INGALLS, M.D.

JANUARY, 1886. A had eleven or twelve years old was seen by me for the first time on the 20th of January, 1886. He was lying on a couch on his back, his knees not drawn up, thin of body and limbs, countenance not particularly anxious, nor was there expression of suffering; pulse 108; temperature 102°. Had had no alvine defection for two days; when he had pain it was in the right iliac region, upon examining which there was found to be a prominence or swelling rising upon the surface of the abdomen half an inch high, oblong two inches, as though an egg were beneath the integuments. He could bear gentle palpation over the whole abdomen, but there was sensitiveness and flinching when it was practised over the swelling. No disturbance as to urination in answer to inquiry.

January 21. By small and repeated doses of opium the past twenty-four hours were passed in tolerable quiet and freedom from pain. Pulse 108; temperature 103°. He had had a fecal defection in the night. The swelling had disappeared; the surface of the abdomen was normal to sight, not very sensitive to touch.

January 22. Patient was found in a state of collapse, which occurred in the night, suddenly. Pulse of great rapidity, temperature not taken. Through the spot where the swelling was, the longer needle of the hypodermic syringe was thrust perpendicularly, and pressure after it caused it to enter its full length; that and two other punctures near by gave negative result.

Dr. C. D. Homans in consultation. We considered the question of opening the abdomen; the collapse, the high pulse, the low temperature, seemed to forbid the attempt, besides which, from all we could learn, the disease began fifteen days previous to the consultation. Soon vomiting began, which nothing seemed to check.

AUTOPSY.

Autopsy, January 24, by Dr. John Homans, 2nd, 10 hours after death:—

Rigor mortis well marked. The abdomen only was opened.

On section of the abdominal walls the peritoneum and intestines appeared generally pale in color but showed a few red spots due to injection of smaller blood-vessels. The coils of intestine were in one or two places glued together by fresh exudations.

In the ilio-caecal region intestines were darker in hue and firmly bound together by masses of fresh