A CASE OF TYPHLITIS, WITH SOME STATISTICS OF THE DISEASE.

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APRIL 3, 1875, I was asked to see A. B., a young man aged twenty-one, who was represented as being "more frightened than hurt." I found the patient in bed, and complaining of pain in the right iliac region, which was decidedly tender on pressure, and somewhat dull on percussion. The tongue was slightly coated. The abdomen was not tympanitic. There was no fever.

The history of the case was as follows: The patient returned from a journey on April 1st, and not feeling just right (his bowels having been somewhat constipated for a few days), in the evening of his arrival he went to bed after taking four "patent" pills, which purged him pretty violently towards morning. After that, he suffered from pain in the region of the cæcum, which increased steadily from the first.

I ordered one fourth of a grain of morphine, to be repeated if necessary. Lime-water and milk were prescribed on account of slight nausea.

April 4th. The pain had been relieved by the morphine, but had returned as soon as the effects of the opiate disappeared. The slightest pressure over the cæcum was very painful, and an ill-defined swelling, absolutely flat on percussion, could be detected there, apparently about the size of a large orange. The countenance was anxious. Pulse 80; temperature 103°. The nausea continued. A flaxseed poultice was applied to the swelling. The lime-water and milk were continued and the morphine was ordered, *pro re nata*.

In the afternoon, the patient was unable to pass water; he was catheterized.

April 5th. Two distinct chills occurred last night. The patient was unable to move without producing sharp pain in the right iliac fossa. The swelling was visible on inspection. Severe nausea continued. The tongue was almost as white as snow. Pulse 140; temperature 104°. There was tenderness on the slightest pressure over almost the entire abdomen; but it was more marked on the right side. I ordered eight leeches to be applied to the swelling. Small doses of champagne were given, and morphine as before.

In the afternoon the patient was delirious most of the time. Pulse 165, weak; temperature 104.6°. Dr. Swan saw the patient in consultation, and agreed with me that perforation had taken place, and that the prognosis was most unfavorable. The catheter was used morning and night.

April 6th. Dr. E. H. Clarke in consultation. The patient remained about the same. The temperature was a trifle lower. The treatment was continued.

April 7th. The bowels were very tympanitic. The patient rejected everything with the exception of an occasional teaspoonful of champagne. Turpentine stupes were ordered to be applied to the abdomen. The urine was drawn morning and night.

April 8th. The patient was rational at times, and reported himself feeling better. There was less tympanites; considerable flatus had been passed. Pulse 145; temperature 103.5°. A little beef tea was retained; about one grain of morphine was taken in twenty-four hours to relieve pain. The tenderness still remained. The catheter was resorted to as usual.

April 14th. In the interval since the last report the patient had slowly but steadily improved. No tenderness remained except in the region of the cæcum, where a slight induration could still be detected. Only one fourth of a grain of morphine had been taken in the previous twenty-four hours. A considerable quantity of champagne, beef tea, and milk was taken. The patient regained control of his bladder on the 10th. Pulse 100; temperature 100°. The patient had had no movement of the bowels since the 2d; an enema was therefore cautiously given, which brought away a few small lumps of hardened feces, followed by quite a profuse discharge a few hours later. The patient felt weak, and suffered considerable pain afterward, but slept fairly after a dose of morphine.

April 18th. Improving. Pulse 95; temperature normal. The tongue was clean but quite red. The patient had had several natural dejections since last record; takes no morphine. The induration had disappeared, but some tenderness on pressure still remained. Friends were inclined to overfeed the man, and were warned not to give him articles of food leaving a large residue, but they did not appear to understand the importance of such extreme caution when he was apparently doing so well.

April 19th. The patient was overfed the day before, and was on this day much the worse for it; he had a large and painful movement of the bowels this morning. Pulse 105; temperature 101°. Severe pain was felt in the right iliac fossa. Leeches were again applied, and the former treatment resumed.

April 24th. The patient got rapidly better after the application of the leeches and the resumption of the liquid diet; the pulse and temperature became normal, and he gained strength every day. The diet was cautiously increased, and tonics were given. On firm pressure, very slight tenderness could still be detected in the region of the original trouble.

May 6th. Except weakness, the patient was now well.

As to the particular form of typhlitis present in this case, there is of course room for doubt; but in all probability the vermiform appendix

was the original seat of the trouble, and the lodgment of a foreign body its cause. This opinion is based on the following facts: Of eighteen fatal cases of typhlitis which I have collected from various sources,¹ in which the symptoms were similar to those present in the case here reported (namely, rapid development of serious illness, and sudden advent of acute peritonitis), in sixteen the appendix alone was found to be the part originally affected; in one, both the appendix and the cæcum were involved; in one, the cæcum alone was inflamed. In sixteen instances a foreign body was found; in two cases no such body was discovered, although in one the appendix was described as having been dilated, and looking as if it had contained one. The appendix was perforated by ulceration in fourteen of the sixteen cases in which it alone was affected; it was gangrenous in the other two.

Fourteen of the eighteen cases occurred among males. The average age was eighteen years, and the average duration a little more than eight days — a length of time very nearly corresponding to the period when my patient was sickest.

This appears to be the form of typhlitis which commonly occurs among young persons of the male sex, and usually proves rapidly fatal. In regard to the nature of foreign bodies which have been found in this and other forms of the disease, the following figures may be of interest: in thirty fatal cases which I have collected, a foreign body was found in twenty-seven; in seventeen instances it proved to be a faecal calculus; in seven instances various substances, such as pieces of bone, nut shells, seeds (found much less frequently than I had supposed), and in one instance a bristle. In three, the nature of the object discovered could not be determined. I am not sure that we are entirely justified in calling a faecal calculus “foreign” when it is found in the cæcum; if it were in the appendix the term would seem more fitting. So small an object as a bristle might easily escape notice unless a most careful search were made, and my impression is that as the appendix has no known function, it is very unlikely to inflame unless under peculiar irritation; and that if sufficient care were taken in looking for objects which may have caused trouble in cases where it has ulcerated, something, however minute, would almost always be discovered. Bartholow, who has published the most exhaustive article on this disease that I have been able to find,² states that of a large number of cases where the appendix had ulcerated, in one only did he fail to discover a foreign body.

In regard to the treatment of this disease, the rapid return of bad symptoms the moment indiscretions of diet were indulged in is a fact worth remembering.

¹ Transactions of the London Pathological Society, Reports of the Boston Society for Medical Improvement, The Lancet, and private practice of my friends.

² American Journal of the Medical Sciences, October, 1866.

The form of typhlitis in which the cæcum is the original seat of trouble appears to be far less fatal, and its course (favorable or otherwise) much more protracted, than when the appendix is affected. Of thirty fatal cases, in four only did the disease begin in the cæcum. These four cases all occurred in women; and it is my impression that this form of the disease chiefly affects female adults, an opinion which I base upon the symptoms presented in the history of cases which have recovered, as well as of those which have ended fatally. The proverbial neglect of the sex to pay proper attention to the condition of the bowels (thereby favoring the formation of fecal concretions) probably accounts for the liability of females to this trouble. That pure cæcitis should terminate fatally far less often than when the appendix is at fault, we can readily understand. The higher organization of the cæcum and its consequently greater recuperative powers render the chances of perforation much less than when the appendix is inflamed. Then again, if the trouble originates in the lodgment of a foreign body, its facilities for escape are far greater in the cæcum than in the appendix. A case recently occurred in the practice of Dr. Whittier, of this city, in which a head of wheat, which the patient (a woman aged forty-three) had inadvertently swallowed, after a lapse of six weeks was passed from the bowels, and the symptoms of severe inflammation of the cæcum at once subsided. Moreover, according to Bartholow, perforation very rarely takes place through the anterior wall, but makes its way through the gut posteriorly, and thus the immediate dangers arising from acute peritonitis are avoided. The appendix, on the other hand, is retained in place by a fold of the peritoneum; and this accounts for the rapid development of acute inflammation of this membrane when the seat of the trouble is here. As a rule, cæcitis is slow in its development, and lacks the marked symptoms which are usually present in the other form of the disease. It is usually in cases of this kind that fecal abscess occurs, ulceration of the appendix often ending fatally before pus has a chance to form or to come to the surface. Moreover, an ulcer perforating the posterior wall of the cæcum comes at once upon cellular tissue, and an abscess is very apt to be the result. That such a collection may be absorbed, and often is disposed of thus, we have abundant evidence. The pointing or rather opening of such an abscess externally is much rarer than one would naturally suppose; in forty-two fatal cases it was observed but twice.

Bartholow states that perforation of the cæcum is of frequent occurrence without being preceded by any irritation produced by a foreign body or by fecal accumulation, a point upon which I have been able to collect very little evidence. He terms this form of the disease "perforating ulcer of the cæcum," and states that such ulcers may be single or multiple, and that the same train of symptoms is present when

the ulcer has made its way through the bowel as are produced in ulceration of the appendix. The only cases which I have been able to find at all answering his description were those in which ulcers had perforated the cæcum as a sequence to typhoid fever or dysentery, long after the illness and apparent convalescence. In two instances a single ulcer was found in the cæcum itself, and in several instances one or more in "the immediate vicinity of the ileo-cæcal valve." The careful exclusion of any previous disease which might give rise to ulceration of the intestines would certainly seem necessary before concluding that in any given case the patient died of this form of typhlitis.

Among the cases which I have collected, various anomalous ones are recorded. In two cases of disease of the cæcum, the perforation was found to be due to tuberculous deposits; and tubercles were also found in other organs. In two cases, reported by Dr. Charles D. Homans, ulceration of the appendix followed a fall, and it is uncertain how long the foreign bodies (fecal calculi in both instances) had been present previous to the accident. That such bodies may remain an indefinite time in the appendix, and still more frequently in the cæcum, without giving rise to any appreciable symptoms, is well known. Ulceration of the sigmoid flexure is not, comparatively speaking, very uncommon. When it occurs, the same phenomena are produced as occur in typhlitis from disease of the cæcum. Four cases of this kind may be found in a single volume (xviii.) of the Transactions of the London Pathological Society. In one case of ulceration of the appendix, no tumor was discovered; the swelling being completely masked by the tympanitic condition of the abdomen.

The nomenclature of this disease compels us to use the same term (typhlitis, typhlo-enteritis) to express two morbid processes which differ widely in their fatality, symptoms, duration, and classes of people whom they respectively affect. It would certainly seem proper that a distinctive title should be invented for that usually fatal ulceration of the appendix cæci which generally affects young people, and in the majority of cases the male sex.

A NEW METHOD OF PREPARING PLASTER OF PARIS BANDAGES.

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THE common method of preparing plaster of Paris bandages by rubbing the plaster into the bandage and rolling it by hand is tedious and untidy. The plaster is scattered about, even when the greatest care is exercised, and the sensation of handling the plaster is decidedly unpleas-