

pebble, which I cast in passing upon your monument of fame. But, should it be the means of preventing one unnecessary or pernicious nephrectomy, or preserve to one poor wretch the internal secretion of his testicles, neither your bequest nor my labours will have been expended quite in vain.

REFERENCES.

¹ *Provincial Med. and Surg. Journ.*, 1845. ² *Ibid.* ³ *Lancet*, 1846. ⁴ *Ibid.*, 1834. ⁵ *Oracle*, 1844. ⁶ *Archiv für klin. Chirurgie v. Langenbeck*, vol. lxxiii, 1904, p. 277. ⁷ *Immunity in Infective Diseases*, Cambridge, 1905, p. 46. ⁸ Third Annual Report of the Henry Phipps Institute, p. 259. ⁹ *Lancet*, August 17th and 24th, 1907. ¹⁰ *Ibid.*, November 2nd, 1907 p. 1218. ¹¹ *Journal of Experimental Medicine*, September, 1907.

A NOTE ON NEPHROPEXY.

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THE interesting description which Mr. Billington has given of a method of nephropexy prompts me to describe a somewhat similar though less elaborate operation, which for ten years I regularly taught in my class of operative surgery at University College, and from time to time perform in hospital and private practice with most satisfactory results.

The principle of the operation is to support the kidney by means of a sling fashioned from part of its capsule, additional support being ultimately obtained by the union of the decapsulated surface of the kidney with the posterior wall of the abdomen.

The operation is performed as follows:—The patient having been placed on her side with a pillow beneath the loin, the kidney is exposed by an oblique incision commencing at the outer border of the erector spinae muscle about $\frac{1}{2}$ in. below the last rib, and running forwards and downwards parallel with the rib for 4 or 5 in. The latissimus dorsi and obliquus externus muscles are separated from one another and retracted, and the lumbar aponeurosis is divided in the line of the skin incision. The kidney is then shelled out of its fatty capsule, and brought out of the wound. Two incisions are thereupon made in its fibrous capsule in the following manner: First, from a point on the outer border of the kidney, a little below the upper pole, an incision is carried obliquely over the posterior surface of the kidney to the lower part of the hilum; secondly, an incision starting from the same point is carried along the anterior surface of the organ, but parallel to the outer border, at a distance of about half an inch from it, and prolonged like its fellow to the level of the lower part of the hilum. The triangular flap thus outlined is peeled off the kidney, but is left attached along its lower border or base. If any part of the quadratus lumborum muscle projects beyond the outer border of the erector spinae, it is divided, and the latissimus dorsi and obliquus externus muscles are thoroughly separated from one another, and retracted at the upper part of the wound so as to expose the upper part of the lumbar fascia, together with the lower two ribs and the intervening intercostal muscle. The kidney is now dropped back into position, but not into its fatty capsule, which has been allowed to fall towards the middle line and lie about the renal pedicle. The flap of the fibrous capsule, held for the time by a couple of forceps, is utilized to raise and hold the kidney so that its decapsulated surface is drawn up beneath the ribs and comes to rest against the anterior or deep surface of the lumbar fascia, the external arcuate ligament, and the diaphragm; the flap is itself spread out, and is stitched along its borders to the outer surface of the lowest intercostal muscle and the portion of the lumbar fascia which intervenes between the wound in the fascia and the last rib. The kidney is thus suspended by a broad triangular ligament, made out of its own capsule, which is continuous with the part of the capsule left attached to the lower third of the kidney.

Further support is gained by a couple of stitches which fasten the lower third of the kidney to the lumbar fascia. The wound is finally stitched up in layers and completely closed. The material used for the buried stitches is silk, and for those in the skin silkworm gut and horsehair.

PERICOLITIS SINISTRA WITH ABSCESS
FORMATION: RECOVERY.

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SEVERAL cases of pericolicitis have been investigated during recent years, and it has ceased, therefore, to be regarded as of rare occurrence, but a detailed description of it has not yet found its way into the majority of English textbooks. The following case, therefore, which came under my notice recently, will be of interest as illustrating the condition in a fairly typical manner.

The patient, a marine engineer, aged 44, came complaining that he was suffering from an attack of malaria. He had returned only a few days previously from South Africa, where he had been resident some ten years, and, while working out-of-doors insufficiently clad, had caught a chill. This ushered in what appeared to him to be a return of malarial fever, the symptoms of which he was thoroughly cognizant of from past experience.

Previous History.

About the age of 18 he contracted gonorrhoea. Six years ago, while resident in Natal, he began to suffer from bilharziosis. The acute stage of this disease lasted nearly a year, but he continued to be troubled in a slighter degree for the next four years, when he became apparently cured. Since then he has had no recurrence. It is interesting to note this in passing, for it is not an everyday occurrence to meet with a cure in a person who has acquired the disease in adult life. The parasite in this instance appears to have been confined to the genito-urinary tract, as the patient never had any symptoms of bowel irritation. Five years ago he had syphilis, for which at first he was not treated. Eighteen months ago he had his first attack of malaria, since when he has had several attacks at intervals. He has suffered all his life from chronic constipation, and this fact has an important bearing on the course of events in this case. The bowels, he said, were never moved save at intervals ranging from three to six days. Apart from this idiosyncrasy he has never had any other bowel trouble.

Condition when First Seen.

The patient was seen on the day following the supposed attack of malaria. He was a thin, rather cachectic-looking man. The spleen was slightly enlarged, but there appeared to be nothing in his condition to lead one to suppose he was suffering from other than an attack of malaria. The blood was unfortunately not examined for parasites, but he was at once put on a course of quinine.

After-History.

He appeared better for a day or two, when suddenly a fresh train of symptoms developed. The bowels, which had remained obstinate in spite of the repeated administration of aperients by the mouth, ceased to act, and he was quite unable to pass flatus. His tongue was thickly coated and dry. He was seized with frequent vomiting, and complained of severe abdominal pain, which seemed to come on in spasms. The temperature was subnormal, but the pulse, which was rather small, was over 100. He lay with the legs drawn up in bed; the abdomen was uniformly distended, the muscles were on guard, and there was an absence of movement of the abdominal walls on respiration. A condition of general tenderness was present on palpation, and a tympanitic note was elicited all over. Liver dullness was diminished. Turpentine stupes were applied locally, and enemata were ordered with a view to clearing out the large bowel. They, however, had absolutely no effect, and as the day wore on the patient's distress became more evident. The vomiting became constant; there was an increase of pain, greater abdominal distension, and a weaker and more rapid pulse; in short, all the signs and symptoms of acute obstruction. Where the obstruction was, or of what nature, it was impossible to say.

Preparations were accordingly made for immediate operation when, as a result of another enema, the patient passed some faeces and a large amount of flatus. It was decided, therefore, to adopt an expectant attitude, with a view to determining, if possible, the site of obstruction. There now followed a temporary general amelioration of the symptoms. The vomiting ceased, and by means of aperients and enemata the bowels were kept acting. The abdomen, however, remained distended, though not to the same extent. There was still a significant lack of movement of the abdominal wall. The patient still complained of general abdominal pain and discomfort. Although on palpation the abdomen was tender all over, no area could be singled out as being more tender than another. The tongue was dry, fissured, and thickly coated, and the pulse was small and about 100.

The patient remained more or less in this condition for some days, during which time he rapidly lost flesh, and became considerably weaker. Except for the initial rise of temperature at the commencement of his illness, the temperature had been normal all the time, but about the ninth day from the

appearance of the first symptoms of obstruction the temperature rose.

Operation.

On examination of the abdomen, which was still distended and tender on pressure generally, a small area of distinctly greater tenderness was discovered in the left iliac region; it was distinctly dull on percussion. This suspicious area was closely watched during the next three or four days, during which time it became visibly larger till it formed a somewhat oval patch measuring about three inches in its long diameter. It was excessively tender on palpation, pitted slightly on pressure, and the patient now referred most of his pain to this region. Synchronous with this all the symptoms of acute obstruction returned. The vomiting became persistent, the vomited matter being almost black in colour. Distressing hiccough supervened which nothing seemed to relieve. The abdomen was rigid and much distended, and waves of peristalsis could be seen through the abdominal wall, evidently indicative of an obstruction fairly low down. The patient complained of pain accompanying each act of micturition. Examination of the urine, however, revealed nothing of significance. On rectal examination there was great tenderness, especially in the neighbourhood of the prostate, which, however, was not enlarged. The rectum was empty and much ballooned; the temperature was 100° and the pulse about 120, very small, and almost thready in character. A consultation was held, and it was decided to open the abdomen immediately in the left iliac region. An incision was accordingly made in the long axis of the dull area, and by carefully working deeper an abscess was opened into and about a teaspoonful of fetid pus evacuated, such as one finds in purulent appendicitis. As adhesions had apparently formed shutting off the cavity it was deemed inadvisable to attempt to explore further. The cavity was therefore washed out and a large drainage tube inserted. Advantage was also taken of the anaesthesia to make a more thorough examination of the rectum, but nothing pathological could be discovered.

The vomiting and hiccough persisted at intervals during the next few days, the latter being particularly distressing. The patient could get very little sleep, and was slightly delirious part of the time. He continued to suffer a good deal from sharp spasms of abdominal pain, and there was still visible peristalsis. A fresh complication supervened in the shape of a septic pericarditis, and the outlook for the patient seemed very grave. The bowels became more and more loose, till there was persistent diarrhoea. The evacuations were very light, almost clay-coloured, and very offensive. The abdomen still remained distended and nearly immobile, and there was great tenderness, especially in the neighbourhood of the wound.

Then gradually the severity of the symptoms began to abate. Vomiting and hiccough disappeared, and he was able to get better sleep. He continued, however, for some time to have frequent sharp spasms of pain, but these gradually disappeared also. The motions then became occasionally formed, and gradually the diarrhoea ceased, giving place to copious, fully-formed stools, which in time assumed a normal aspect. The wound was kept open for some time, and then allowed to heal up.

The case presented some difficulty at first. The signs and symptoms resembled so closely those characteristics of an attack of appendicitis that, if they had occurred in the right iliac fossa instead of the left, a diagnosis of appendicitis would undoubtedly have been made, and an operation undertaken at an early stage for the removal of the offending organ.

As it was, the fact that the appendix might be to blame was not lost sight of, and this at first was one of the possibilities one had in mind. In fact when occurring on the right side pericollitis has frequently been mistaken for appendicitis and it seems extremely difficult to distinguish between the two conditions. Before definitely localizing symptoms in the form of abscess formation became evident, one had also to take into account the possibility of the presence of malignant disease. In support of this there was the loss of weight, obstinate constipation for some time before the cachectic appearance of the patient, together with definite signs of obstruction probably somewhere in the region of the sigmoid as evidenced by the nature of the peristalsis and the ballooned and empty condition of the rectum. Against this we had to set the greater amount of pain than is usually expected in malignant disease. The extreme tenderness, the fever, and ultimately the rapidly increasing area of dullness with superficial oedema, helped to discount the theory of malignant stricture.

The conclusion finally arrived at, therefore, was that we were dealing with a case of pericollitis, probably of the sigmoid flexure and ending in abscess formation. In favour of this theory there was first of all the history of chronic constipation, a preceding factor found in so many

of the recorded cases of pericollitis, and apparently a factor of some importance. Indeed, according to Rolleston,¹ chronic constipation is given as the commonest cause of pericollitis. Further, the position of the lesion corresponded with what is generally regarded as the commonest site of pericollitis, the sigmoid flexure. The definite symptoms in these cases would appear to come on fairly suddenly, and in this case the onset of acute symptoms was sudden.

As regards the pathology of the case, it was, perhaps, unfortunate, from one point of view, that the exact condition of the walls of the bowel could not be determined, especially as various theories have been advanced to account for the condition. What probably took place was that a local inflammation of the tissues in immediate relation to the sigmoid flexure occurred, cause unknown—perhaps the result of a discontinuity in the mucous membrane, perhaps the result of simple constipation, with infection of a sacculus. The peritoneum became involved with all the usual signs of peritonitis and obstruction. Instead of this inflammatory condition becoming resolved, as frequently happens, it progressed fairly rapidly to abscess formation—not so fast, however, not to allow of adhesions forming—and in this particular case, following this, we have pericarditis resulting from septic absorption.

It is interesting to note how, after the first few days following the operation, the patient began to make a steady, uninterrupted recovery, with the gradual disappearance of all signs of abdominal trouble. He is now in excellent health and has regained his normal weight. There are no evidences of thickening or adhesions anywhere in the left iliac region, and he has a daily natural action of the bowels.

REFERENCE.

¹ *Trans. Med. Soc., London, 1903, vol. xxviii.*

THE PART PLAYED BY PEDICULUS CORPORIS IN THE TRANSMISSION OF RELAPSING FEVER.

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ON August 16th, 1907, I was dispatched by the Director of the Laboratory (Lieutenant-Colonel W. B. Bannerman, I.M.S.) to investigate an outbreak of relapsing fever which had broken out about a month previously in the Nasik Mission Settlement. I remained there exactly a month, by which time the epidemic had practically subsided. The results of my investigation, though in some respects incomplete, may be considered of sufficient interest to warrant publication, especially as, owing to stress of other work and the absence of relapsing fever in Bombay, many months may elapse before I shall get an opportunity of extending my inquiries.

GENERAL OBSERVATIONS.

The Mission Settlement contains a population of about 284 persons, including 170 boys and 114 girls. It is under the charge of the Rev. A. and Mrs. Manwaring, to whom and to Miss Landon, M.B., I am greatly indebted for their ever ready kind assistance and information. The surroundings and general sanitary conditions of the Settlement were excellent, and it was evident that these factors had nothing to do with the outbreak. The boys and girls occupied separate buildings scattered in a large compound, and their conditions of life were otherwise identical. The boys occupied the newer, and the girls the older and somewhat dilapidated, bungalows. As a result of this the girls' quarters were infested with bugs, whilst the more recently constructed boys' wards were almost entirely free from these pests.

I was a constant visitor to all these buildings, and was very much struck by the enormous number of bugs procurable from the girls' wards and the absence of them from the boys'. Still more striking was it that the boys were infested with body lice, whilst the girls at first were entirely free. The same rewards and inducements were held out for the production of all kinds of parasites, but all the lice came from the boys', and all the bugs from the girls' wards. *Pediculi capitis* were obtained in small