and disability continuing, nephrectomy was eventually resorted to.

The subsequent fate of patients submitted to nephrectomy must always be worthy of attention, but the comparatively short period which has elapsed since many of my operations were performed, and the difficulty of tracing hospital cases, renders the record I am now about to mention of less value than it would otherwise have been.

Eight of the 9 patients operated on outside the General Hospital remain well; 1 is suffering from recurrence of growth; the longest interval of time since the first of these operations is nine years.

Of the hospital patients I am unable to learn anything concerning 10; of the remaining 20, 19 are alive, and as far as can be gathered in reasonable health, several of them expressing themselves as "in very good health." One patient is dead, a woman operated on five and a half years ago, when 38 years of age, for a huge polycystic kidney. The other kidney, at that time just palpable, rapidly increased in size, but remained for a long time fairly efficient in its excretory functions, and the patient was enabled to lead an active and useful life, which without nephrectomy would not, I think, have been possible. In September, 1906, the excretion by the remaining kidney was becoming very insufficient, and the patient died in January last, after a brief illness the details of which I have not been able yet to obtain.[1]

REFERENCE.

1 *Lancet*, May 20th, 1906, p. 1326.

A CASE OF PYONEPHROSIS CONTAINING TYPHOID BACILLI IN PURE CULTURE.

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IN the report of the proceedings of the Clinical Society of London held on May 10th, 1907, Drs. H. French and M. Louisson contributed a paper on the extent to which Widal's reaction persists after recovery from typhoid. The following case is worth recording from this point of view:

History.

A. B., aged 35, who was sent to me at the Derbyshire Royal Infirmary by Dr. Chawner of Clay Cross, suffered from typhoid fever rather more than six years ago. The disease was acquired from contaminated well water. After eleven weeks' illness he apparently became convalescent and was allowed to get up, but a week later he had a severe relapse and was in bed again for about seven weeks. He recovered and returned to work as a collier.

He said that during his illness he had occasional difficulty in passing water. He passed "lumps of flesh like liver as big as peas" for about a fortnight; he then passed thick water with pieces of "phlegm" in it, especially towards the end of micturition. This has occurred occasionally ever since.

Seventeen weeks before admission he complained of pain in the left loin and was attended by Dr. Chawner of Clay Cross for nephritis. After eleven weeks of pain he returned to his employment and managed to work for three weeks, when the pain became worse, and he went to bed again. Two weeks before admission a swelling was noticed in the left loin. The pain had been constant in the left side, but had extended occasionally to the left groin and testicle. There had been occasional attacks of vomiting. He had lost flesh considerably; the bowels had been fairly regular, but lately somewhat constipated.

Condition on Admission.

He was a distinctly emaciated and anxious-looking man, with a pale, earthy complexion, and a somewhat dry, slightly-furred tongue. The temperature was normal and the pulse 80. The urine, 1028, acid, contained neither albumen nor sugar.

A large, tender swelling was seen extending from the left costal margin to about 2 in. from the left iliac crest. It extended forwards to the middle line, and was more prominent above the level of the umbilicus. The swelling did not descend on respiration. It was tender on palpation, was smooth and rounded, and no irregularities, such as notches or nodules, could be felt anywhere. A distinct thrill could be felt by a hand placed on the tumour in front if light percussion was made in the loin; fluctuation could also be made out. The percussion note was dull and could not be separated from splenic dullness. The liver was not felt. Nothing abnormal was detected in the chest, and no signs of disease were found elsewhere.

On the day following admission the urine was examined with the result: Specific gravity, 1020; acid; trace of albumen; no sugar; deposit of urates. Segregation of the two ureters was performed on two occasions by Luys's separator. No urine was obtained from the left half of the bladder.

Operation.

On April 12th, three days after admission, he was placed under an anaesthetic and cystoscopy performed.

The right ureteric opening was seen to be normal. The left ureteric opening was difficult to see, as it was surrounded by a stellate arrangement of engorged veins. No urine was observed to issue from it, and no pus. Nothing else abnormal was seen in the bladder. The patient was placed semi-prone on the right side, and the usual left lumbar incision was made. After the muscles were incised, a trocar and cannula was introduced into the tumour, and pus appeared. This was received into a sterilized test tube for further examination. The opening was enlarged, and an exploratory finger felt a large stone in the left ureter. This was extracted without much difficulty. The sac was enormous, but soon contracted on being emptied. Its content was pus with hardly any urinous odour. Two drainage tubes were inserted, and the wound closed in the usual way.

After-history.

The operation was followed by a quite uninterrupted recovery. The average urinary output before operation was 22 oz., after operation 67 oz. Three weeks after operation there was only a small sinus left; one week later the last tube was removed, and this rapidly closed. He was sent to the Convalescent Home five weeks after the operation.

Bacteriological Report.

The pus was sent to the Clinical Research Association, and the following reports were received:

I.

The only organism met with in the pus and in the culture prepared from it is a Gram-negative bacillus, belonging apparently to the *enteritidis* group. Its pure cultures will require further investigation, and the identification of the bacillus is difficult and may be impossible. A further report will follow in due course.

II.

The organism isolated from your case of pyonephrosis has all the cultural and microscopical characters of the *Bacillus typhi-abdominalis*. When freshly isolated the bacillus showed no tendency to become agglutinated on treatment with a serum from a case of enteric, and we were therefore inclined to believe it was not the typhoid bacillus. However, after sub-cultivation several times the organism now gives a fairly well-marked reaction.

The suggestion was made that Widal's reaction should be tried, and a specimen of the patient's blood was sent up and the following report was received:

This serum shows the reaction characteristic of typhoid fever with all the dilutions employed—namely, 1 in 10, 1 in 25, 1 in 50.

A fortnight later a second specimen is reported upon as follows:

The serum gives a well-marked Widal's reaction, producing rapid agglutination of typhoid bacilli in dilutions of 1 in 10, 1 in 25, 1 in 50, and well-defined clumping within thirty minutes with a dilution of 1 in 200. An attempt was made to isolate the bacilli from a portion of the dressings and drainage tube, but without success, owing to contamination by other organisms.

The calculus was nearly entirely phosphatic, with a centre which contained phosphates and a predominance of oxalates.

I have no knowledge of calculous disease as a sequela of typhoid fever, and on looking up the subject of typhoid pyelitis I can find no case recorded where a calculus was formed subsequently. It is possible that the calculus was pre-existing, but I do not think it probable, as there were no symptoms of urinary trouble before the attack of enteric, and they were so extremely prominent during the attack. I think the case is sufficiently interesting to report, both on account of its rarity and on account of the persistence of the typhoid bacilli in the kidney for so many years.

TWO CASES OF SUPRAPUBIC LITHOLAPAXY.

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THE two cases of vesical calculus reported below are interesting in so far as they were dealt with, with excellent results, in a manner somewhat different to that usually adopted. The patients were both young children of poor physique, on whom it was impossible to perform the usual "crushing operation," even with modern perfected instruments.

The stones could only be removed by the suprapubic