Causation

Previous History.	Exciting Cause.	Number of Cases.
No history of illness	Scarlatina	3
No history of illness	Other infectious fevers	8
History of previous fever. (No nephritis)	Influenza	2
History of previous fever. (No nephritis)	Sore throat	3
History of previous fever. (No nephritis)	Cold and exposure	1
No previous illness (child of 9 weeks)	Acute intussusception	1
No previous illness... ..	—	2

I am aware that the foregoing table is not very helpful in arriving at a conclusion as to the most frequent causes of acute nephritis. On one point, however, I am convinced, and that is, that the history of previous infectious disease is of very little importance. It is the exciting cause which is the important one.

How many of the population escape measles, whooping-cough, and influenza in the course of their lives? Only a small proportion, and this proportion is not less in those who suffer an attack of acute nephritis. The exciting cause is to be sought for in the exanthems, the catarrhs, and, to a less degree, in the septic affections. And as these become more effectually controlled, so will acute nephritis become a rarer affection.

Conclusions.

To sum up, I would put forward the following propositions:

1. Acute nephritis is not a very common disorder.
2. Acute nephritis is usually due to the direct effect of some infectious fever, catarrh, or septic process.
3. The great majority of cases recover completely, therefore the prognosis is good.
4. The diagnosis of acute nephritis (primary) can seldom be made with certainty during the acute attack, and therefore a prognosis cannot safely be given until after an interval of a few weeks at least.

PYONEPHROSIS: OPERATION: RECOVERY.

BY

EVAN OWEN BOWEN, M.B., CH.B. EDIN.,
CARDIGAN, SOUTH WALES.

THE condition found in the following case of pyonephrosis was probably due to some congenital malformation.

The following is the history of the patient, a boy aged 14, as obtained from his mother, who states that she herself, the boy's father, and other nine members of the family are perfectly healthy.

The boy's illness can be traced back to the time when he was three months old, when the mother noticed that the child was puny, thin, sickly, irritable, and continually crying. A doctor was called in and the baby was given some medicine, but the doctor did not then express any opinion as to what the trouble was. The child improved a great deal after that, and it was nearly three months afterwards before the mother found that there was a thick yellowish discharge on the napkins which she thought came from his bowels. She again consulted her doctor, and he informed her that the matter came from the bladder, and that there was some inflammation in that organ. It was then noticed that every time the child made water little lumps of matter passed through the urethra. The child cried before and after the act, and the colour of the urine, as far as the mother can remember, was invariably light. He was not what could be termed "ill" at that period, but from that time forward she noticed that the boy had to pass water far more frequently than any of her other children. Sometimes he would have pains for days, then these would suddenly cease, and the patient would be free perhaps for a week or more, when they would again come on quite suddenly and without any apparent cause. This intermittence has continued throughout all the years. Sometimes the pains were mild, but at other times they were so acute and severe that the boy was confined to bed for days. In the intervals of freedom from pain he was in perfectly good health and able to attend school. There was no sickness or vomiting when the paroxysms of pain came on, and the bowels had always been regular.

Apart from measles when he was 7 years old he had had no other illness.

In the early part of 1911, a swelling commenced to show in the

back over the region of the left kidney. This gradually grew bigger until it was lanced a few weeks afterwards by the medical attendant. A large amount of matter escaped at that time, and the wound did not close.

I saw the boy for the first time towards the end of August, 1911. He had been confined to bed for three days with an unusually severe attack of pain. He was looking languid, pale, and emaciated; his features were thin and drawn, his eyes were heavy and sunken, his tongue dry and furred, and thirst troubled him a great deal. There were occasional rigors. The pulse that evening was 84, and the temperature 99° F. Posteriorly on the left side there was a sinus, the opening of which was 2½ in. below the last rib, and 3½ in. from the middle line of the back. The dressings that had been placed by the mother over the sinus were saturated with a thin, greenish-yellow, mucopurulent pus. The patient complained of a dull aching pain in the left loin, and of frequency of micturition and great tenesmus. On palpation under an anaesthetic the left kidney was found to be markedly enlarged and very tender, and on pressure being gently exercised over it, pus was seen to exude freely from the sinus posteriorly. The urine was dark red, and contained a large amount of deposit. It was alkaline in reaction, with a specific gravity of 1004, and yielded positive results for albumen and blood. The microscopical examination of the centrifugalized deposit revealed the fact that the deposit consisted almost entirely of pus, with red blood corpuscles, and the normal urinary epithelial cells and mucin. Tube casts, renal cells, and crystals were also detected. Specially stained films failed to demonstrate the presence of the tubercle bacillus, though numerous micrococci were observed.

On August 24th he was admitted into my home, and kept under observation until August 29th. During that time his temperature was very irregular, and ranged between 97.2° and 100.4° F. His pulse-rate kept between 68 and 102. On August 30th I resolved to remove the left kidney.

Operation.

I chose the abdominal route, and the operation was performed on the lines advocated by Treves for abdominal nephrectomy.

The right kidney on examination appeared perfectly normal, but it was distinctly enlarged.

A great deal of difficulty was experienced in freeing the posterior surface of the diseased kidney owing to the existence of strong and dense adhesions. I was able, fortunately, to clamp the sinus before incising it in the course of dissection, thus preventing any escape of pus into the coffer dam which I had established at the commencement of the operation. Little difficulty was experienced with the pedicle. At the end of the operation the opening of the sinus was enlarged posteriorly, and a drainage tube inserted.

The patient bore the operation remarkably well, and we had little or no trouble with him during the whole time he was in the home. He was discharged on November 7th apparently cured, and is now playing about with his companions and attending school regularly.

The condition of the diseased kidney can be seen from the accompanying photograph. It was 5 in. long, 4 in. broad, and 1½ in. in thickness. On section a large amount of greenish-yellow pus escaped, and the organ presented a picture of degenerated parenchyma with a number of abscess cavities, the majority of which were filled with soft, irregular concretions, which easily crumbled between the fingers. A direct communication could be demonstrated between most of the cavities and the pelvis. The pelvis was enlarged and much thickened. A piece of glass rod is inserted into the abscess cavity in the kidney that communicated with the perinephritic abscess.

From a consideration of the morbid anatomy of the diseased organ, it would appear that the condition must have been due, in the first instance, to some congenital malformation of the ureter or its pelvis. The lower portion of the pelvis is much more dilated than any other