STRICTURE OF THE URETERS FOLLOWING GONORRHOEA A CAUSE OF HYDRONEPHROSIS.

By W. GIFFORD NASH, F.R.C.S.,
Bedford.

AMONGST the numerous causes which give rise to hydronephrosis, I am not aware that gonorrhoeal stricture of the ureters has been mentioned. Dr. David Newman, in his work on the *Surgical Diseases of the Kidneys*, does not mention stricture of the ureters, but on page 167 says, "It is now recognised that the infective matter of gonorrhoea may excite an ascending inflammation in the ureters and pelvis." Mr. Henry Morris,¹ quoting Roberts, notes five cases of narrowing or obliteration of the ureter near its origin or termination, produced presumably by some preceding inflammation or ulceration. This he ascribes to an injury, or the passage of a calculus along the ureter. Mr. A. E. Barker, in his article on hydronephrosis,² says, "The causes of this condition are many. The commonest is impaction of a stone in the top of the ureter; next to this the closure of the latter by some inflammatory change." This class would embrace gonorrhoea.

My attention was drawn to the subject by a specimen in the museum of St. Bartholomew's Hospital, No. 2361A, which is described as follows in Walsham and Power's *Surgical Pathology*, p. 593 (a book descriptive of the specimens in St. Bartholomew's Hospital Museum) under the head of congenital stricture of the ureters:—"The kidneys, ureters and bladder. The kidneys are enlarged and sacculated, and their pelves are dilated. The right ureter immediately beyond the pelvis of the kidney presents a very tight and tortuous stricture about an inch in length. The stricture is so tight that it was barely possible to inject water through it. Two inches lower down this ureter is again constricted, but the second stricture is not so narrow, and is annular in form. The left ureter is also constricted in two places about two inches apart. The upper stricture is situated two inches from the kidney, and the ureter above it is dilated into a pouch. The strictures will admit of the passage of a No. 7 catheter. All the strictures are tough and fibrous, and appear to be of long standing. The bladder is much hypertrophied. From a man, aged 44, upon whom urethrotomy was performed for the relief of an impassable stricture of the urethra."

The ureteral strictures in this case I believe to have been produced by gonorrhoeal inflammation. Against their being congenital are the facts (1) that the dilatation of the renal pelves and calyces was not so advanced as would have been expected if the obstruction had lasted 44 years; (2) congenital strictures are usually found at one or other extremity of the ureter, and, as far as I know, are never multiple. In favour of their being gonorrhoeal there was the presence of stricture of the urethra, and the appearance of the strictures as if due to some severe and extensive inflammation of the walls of the ureters. That gonorrhoeal inflammation of the ureters may occur is evident from the fact that the inflammation occasionally spreads to the pelves of the kidneys, causing pyelitis and pyonephrosis. This being so, there seems to be no reason why stricture should not result from inflammation in the ureter just as it does in the urethra.

A CASE OF GASTROSTOMY FOR MALIGNANT DISEASE OF THE OESOPHAGUS CAUSING TOTAL OBSTRUCTION: SURVIVAL FOR 407 DAYS.

By RUTHERFORD MORISON, M.B., F.R.C.S. ENG. & ED.,
Assistant Surgeon Royal Infirmary, Newcastle-on-Tyne.

MR. GREIG SMITH, in his excellent work on *Abdominal Surgery*, page 362, states, "So far as I know, the most successful operation for cancerous stricture (of the oesophagus) is one performed by Dr. James Murphy, of Sunderland. His patient lived for 403 days after the operation, which was not per-

formed till obstruction was complete." The following notes refer to a case under my care which has beaten this record:

W. O., aged 45, was sent to me by Dr. Campbell of this city on the evening of October 25th, 1890, as a case of malignant stricture of the gastric end of the oesophagus, urgently requiring gastrostomy. He complained of being very hungry, and unable to keep food down. The history was that for four years he had suffered from "indigestion," and for thirteen weeks had been unable to take any solid food. The difficulty in getting food down had steadily increased, and for two days everything taken had "come up again." He had suffered acutely from hunger for some days.

The patient was much emaciated (from weighing 10 st. he was reduced to 7 st.), but was fairly strong, and had no physical signs of disease other than an obstruction at the lower end of the oesophagus, discovered by Dr. Campbell on exploration with a bougie. Water and milk returned at once when he attempted to take them, but in my presence he managed to take and keep down a raw egg. This egg was the last substance of any sort he was able to swallow and retain.

The first stage of gastrostomy was performed on October 27th, 1890, strength being maintained by warmth, rest, and nutrient enemata. The cardiac end of the stomach and its anterior wall were extensively infiltrated by malignant growth, so that it was necessary to draw the greater curvature of the organ forward, and, after separating the omentum from it, to attach this portion of the stomach to the abdominal wall. On October 30th, 1890, three days afterwards, the operation was completed by opening the stomach, and the patient was fed for the first time.

A week after the operation he sat up and dressed, having suffered neither pain nor constitutional disturbance; he was still very hungry. A wineglassful of whisky, a pint of milk, and a raw egg, administered by the opening through a tube and funnel, relieved the feeling of hunger, which never returned in the same aggravated form again. He went home on November 13th. His weight was as follows: November 7th, 7 st. 6 lbs.; November 13th, 7 st. 8 lbs.; November 24th, 7 st. 9 lbs.; December 22nd, 7 st. 11 lbs.; January 29th, 1891, 7 st. 13 lbs.; May, 8 st. 4 lbs. There was thus at this date a gain of 1 st. 4 lbs. since the operation.

In May, 1891, he went to his work as a tailor, and "felt better and lightsomer than he had done any time the last three years." He enjoyed a pipe, felt great comfort from a little rum, and was satisfied with his condition. The gastric fistula did not leak, and occasioned no trouble except at the moment of withdrawing the tube, when fluids would escape without care. By placing a finger gently over the orifice, and getting the patient to cough, this could easily be avoided, the cough producing a prolapse of mucous membrane of sufficient size to block the opening.

From May till August, 1891, he worked as a tailor, when he had to give up on account of a cough. In December, 1891, I received a letter from Dr. Clarke. The following are extracts:

"A late patient of yours, W. O., has just died (December 8th, 1891) under my care. You performed gastrostomy on him for malignant disease of the oesophagus, and since he has been fed entirely through the abdominal opening. I tried hard to get consent for a *post-mortem* examination, but his wife would not allow me to make any investigation. He died of infiltration of the lungs by the malignant growth, and you will doubtless be glad to complete your record of the case by an entry as to the exact length of survival after the operation."

From this record it will be seen:

1. That the patient lived for 407 days after the performance of gastrostomy, and this in spite of the unfavourable conditions found at the operation.
2. That an unusual symptom in malignant stricture of the oesophagus (hunger) formed a strong argument in favour of operation in this case.
3. That gastrostomy may, in even unfavourable cases, be performed with little risk and with a fair chance of prolonging useful life in tolerable comfort.

PORTABLE iron hospitals are now being erected for the reception of infectious cases at Derby, Cardiff, and Cleckheaton by Humphreys (Limited).

¹ *Surgical Diseases of the Kidneys*, p. 295.

² *Heath's Dictionary of Practical Surgery*, vol. i, p. 759.