Clinical and Other Notes.

A CASE OF BILATERAL CONGENITAL HYDRO-URETER AND HYDRONEPHROSIS.

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[Received May 21, 1946.]

CONGENITAL abnormalities affecting the urogenital system are not uncommon. The large majority of these are vesical or supravesical lesions which is understandable in view of the embryology of the urogenital tract. They result from abnormal or additional outgrowths of the mesonephros or from faulty fusion of these with the metanephrogenic cap.

Infravesical lesions are rare and their pathology appears to be somewhat obscure. They are in the nature of obstacles to the discharge of urine in contradistinction to suppression of renal secretion. This obstruction to urinary discharge can be explained by mechanical blockage or neuro-muscular disturbance. It is a characteristic feature of the greater number of these cases that, even when of a mechanical nature, instruments can be passed into the bladder with ease [1]. This suggests an urethral obstruction of valvular nature. Various authors have attributed the obstruction to partial or complete septa, valves in the posterior urethra, or phimosis [2]. It had been observed that the valves are usually stretched between the verumontanum and the wall of the posterior urethra. Congenital hypertrophy of the verumontanum has also been described [3, 4]. In several cases it has not been possible to find an anatomical basis for the obstruction at post-mortem examination. These cases are probably due to a disturbance of nervous mechanism either centrally or peripherally, causing spasm of the bladder sphincter [5]. Such cases have been found associated with Hirschsprung’s disease [6]. The obstruction to the urinary outflow causes bladder distension and hypertrophy which eventually leads to incompetence of the ureterovesical sphincters and results in dilation and hypertrophy of the ureters and renal pelvis.

The following case of congenital bilateral hydro-ureter and hydronephrosis is reported.

A Chinyanja speaking “askari” (African soldier) of about 23 years of age was admitted to the Surgical Division of an Indian General Hospital (Combined), complaining of haematuria. It was impossible to obtain a full and accurate history owing to language difficulties and the fact that the patient’s recollections of earlier events were very vague. When questioned he stated that he had had difficulties with micturition as a small boy. He first reported sick with haematuria three years previously and had had intermittent attacks ever since.
Fig. 1.—Dilated right ureter just visible on tips of transverse processes.

Fig. 2.—Intravenous pyelogram. Bilateral hydro-ureter and hydronephrosis.
Clinical and Other Notes

Fig. 3.—Dye injected to bladder and flowing up ureter.

Fig. 4.—Dye injected through ureteric catheter.
Clinical and Other Notes

Nothing abnormal was revealed on clinical examination. Blood-pressure was 120/60. The urine contained a trace of albumin and some red cells. Cultures were sterile. As painless haematuria in Africans always arouses suspicion of bilharzia a series of urine specimens were searched for schistosoma ova, but with negative findings.

The blood urea was 22 mgm. per 100 c.c.

Cystoscopy: Bladder capacity about 10 oz. Mucous membrane normal. Marked hypertrophic trabeculation of the bladder wall. Both ureteric orifices were wide and gaping to the size of a No. 10 catheter. Little peristalsis of ureters observed.

Straight X-ray showed the shadow of what appeared to be a grossly hypertrophied right ureter opposite the fourth and fifth lumbar vertebrae (fig. 1).

Intravenous pyelogram revealed marked bilateral hydronephrosis and hydro-ureter, with good secretion and concentration on both sides. A constricted segment was observed in the left ureter opposite the bodies of the fourth and fifth lumbar vertebrae (fig. 2).

Retrograde Pyelogram.—The cystoscope was passed with ease and a ureteric catheter introduced into the left ureter to 6 cm. where it stopped. 4 oz. of sodium iodide were injected into the bladder through the cystoscope. X-ray showed the opaque fluid flowing up the left ureter (fig. 3). It is not clearly understood why the dye entered only the left ureter but it is probably due to the presence of the catheter. Sodium iodide was then injected into the ureter but did not rise above the constricted segment (fig. 4). A single catheter cystoscope only was available.

The majority of these cases are believed to die in childhood. The patient under review has reached adult life and does not appear to suffer from any severe renal damage.

Our thanks are due to Colonel Langford for permission to forward this case.

References.

Poliomyelitis in Singapore.
(A precis of a report by Dr. A. M. MacFarlan of the Medical Research Council made to D.M.S., Medical Division, SACSEA. Forwarded April 4, 1946.)

When the Allies re-entered Singapore in September, 1945, they found gross insanitary conditions but little destruction of the city. During the next three months the civilian population increased by some 2,000 a week due to immigration. In January, 1946, five unconnected cases of poliomyelitis were reported in Chinese children on the Island and the possibility of an epidemic was recognized. Prompt measures in the way of propaganda, search for early cases and improvement of sanitation were undertaken. In spite of this over 180 cases of poliomyelitis with 18 deaths occurred from December 23, 1945, to March 23, 1946.
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*J R Army Med Corps* 1946 87: 34-37
doi: 10.1136/jramc-87-01-04

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