Retrospective Study on 23 Cases of Congenital Hydronephrosis

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ABSTRACT

We reviewed 23 patients who have undergone surgery for Congenital Hydronephrosis in Salmaniya Medical Centre and Bahrain Defence Force Hospital for the period between November 1979 — November 1984

There were 18 male and 5 female patients. Eleven had congenital Pelvi-Ureteric (P.U.) junction obstruction on the right side. The remaining patients were obstructed on the left side with one case of bilateral obstructions. Congenital Hydronephrosis was diagnosed in all cases.

All patients underwent conservative surgery. In doing this we aimed at renal salvage and improvement of function.

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METHOD

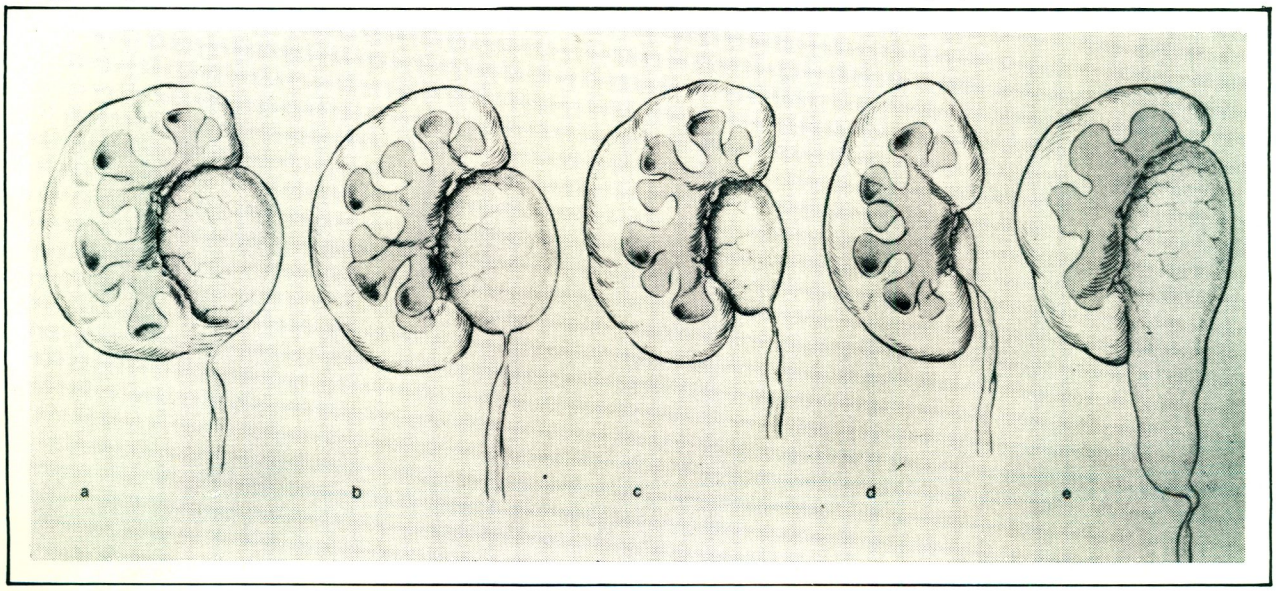
We studied 23 patients that had undergone surgery for Congenital Hydronephrosis. Eighteen were male and the remaining 5 were female. The age range was between 15 — 55 years.

Most of the patients referred were experiencing loin pain and had radiological or ultrasonic evidence of Hydronephrosis. In one case this was discovered accidently during a routine check up.

Five of our patients had renal calculi on the obstructed side, one had a horseshoe kidney and another had a ptosed right kidney. The obstructed kidney was exposed through a subcostal loin incision and the P.U. junction was meticulously dissected. Anderson Hynes pyeloplasty was performed on 18 cases, 3 cases had Culp - Deweerd - Scardino plasty, one case had Y - V Foley plasty and one had Uretrolysis. Five cases had pelvic calculi removed and one nephropexy was carried out. We also completed the division of one horeshoe kidney.

A Cummins nephrostomy splint was used in all cases and an antegrade pyelography was performed on the tenth day postoperatively. The splint was removed on the same day if no leakage was in evidence. Intravenous pyelography was carried out three months after the surgery.

FIGURE I.
Types of P. U. Junction Obstruction.



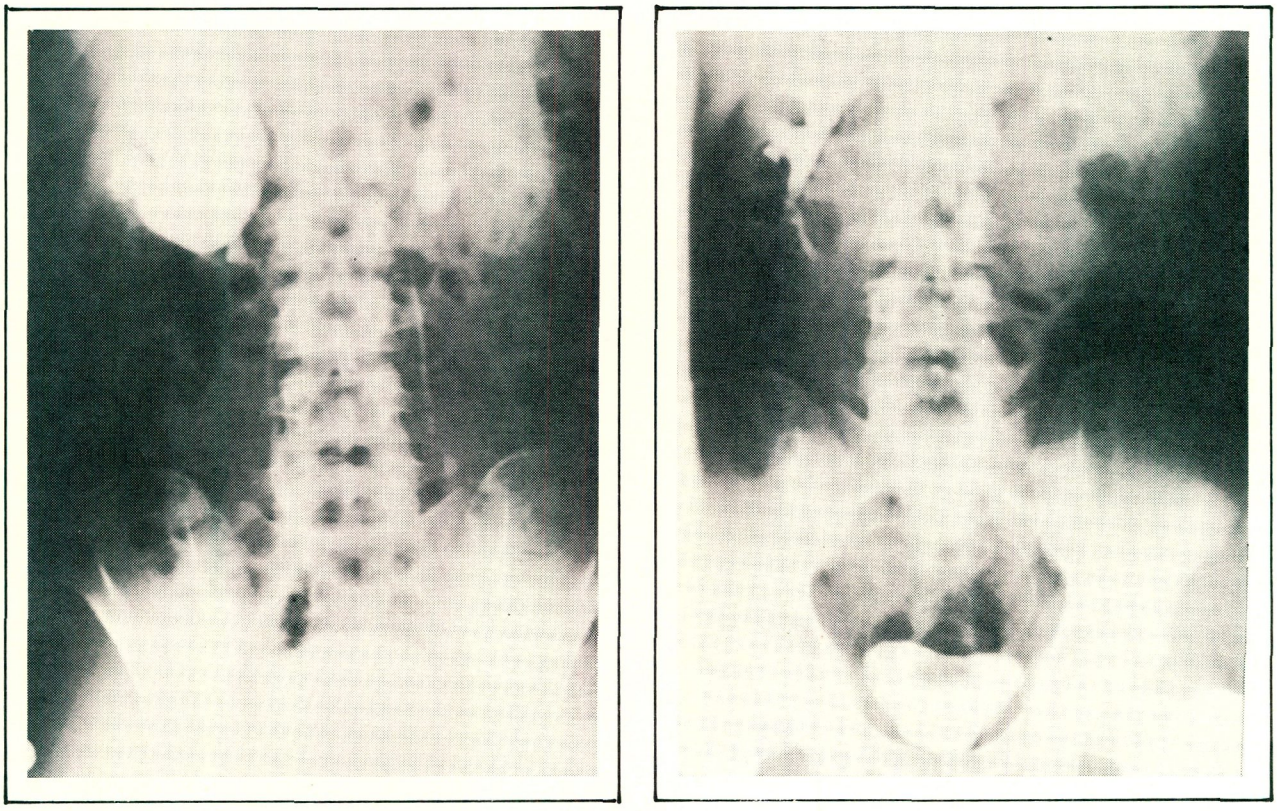


FIGURE II Rt P.U. Junction Obstruction before surgery and after surgery.

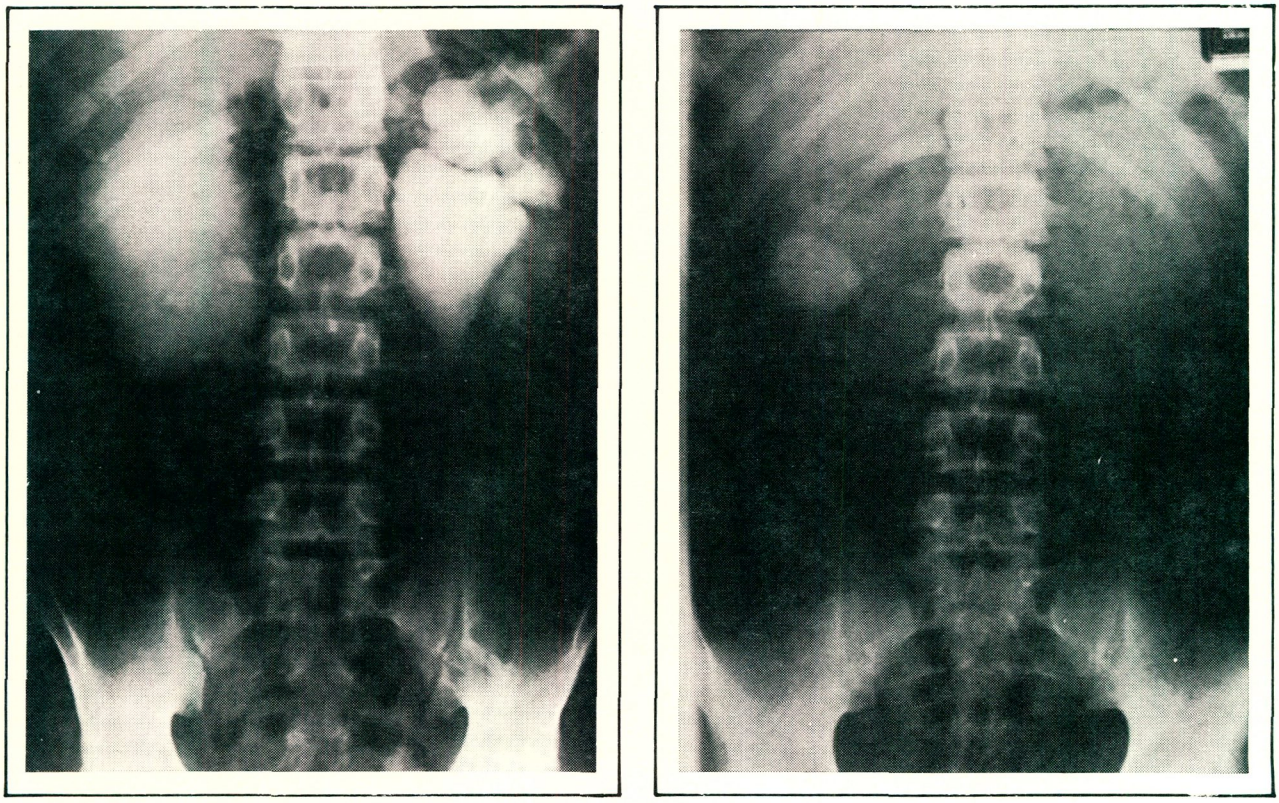


FIGURE III
Bilateral Congenital P.U. Junction Obstruction *IV P KUB Calculus Rt. Side*

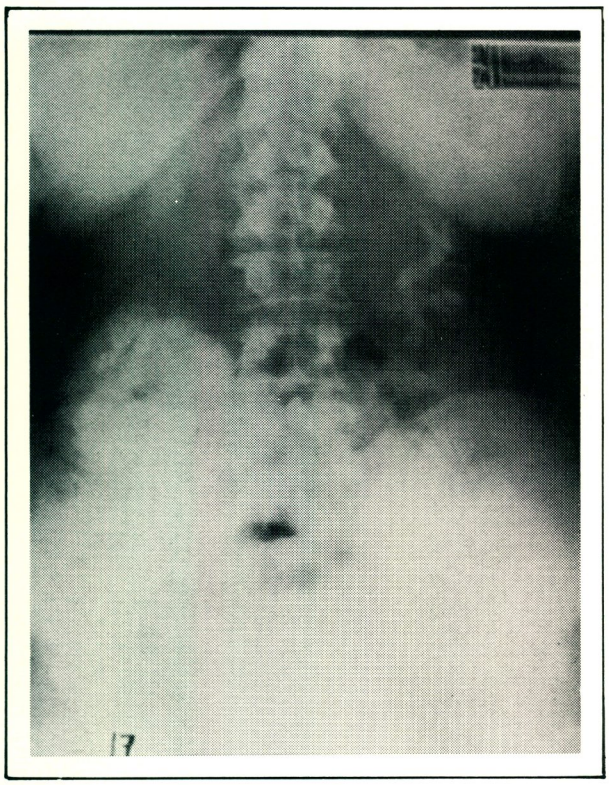


FIGURE IV
Ptosed Rt Kidney with P.U. Junction Obstruction.

RESULTS

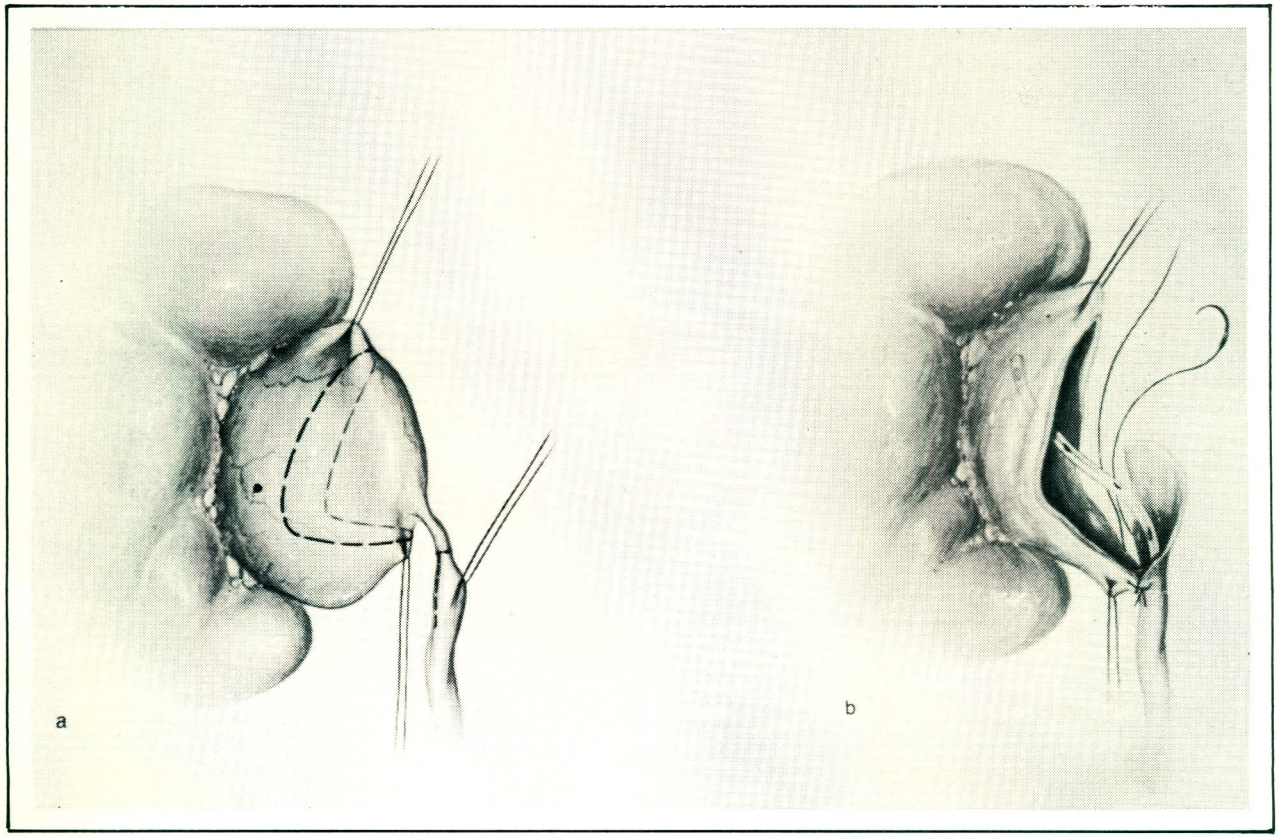
In the early postoperative period two cases had nephrostomy tract leakage which stopped in seven and ten days respectively. At present 22 of the patients remain symptom free. One of the female patients has occasional loin pain and radiological findings show minimal improvement.

DISCUSSION

In our survey most of the patients were adult and presented with loin pain, while in early life the main presentation is intermittant loin pain, pyrexia and haematuria (1). In all suspected cases ultrasonography and IVP must be performed.

Although it is a matter of choice for splintage of the anastomosis, we prefer to splint. Anderson Hynes pyeloplasty is an operation which has stood the test of time and in experienced hands should give a good result (2,3,4). It is advisable to deal early with persistent nephrostomy tract leakage as occasionally it does indicate early postoperative re-obstruction (1).

FIGURE V
Anderson Hynes Pyeloplasty



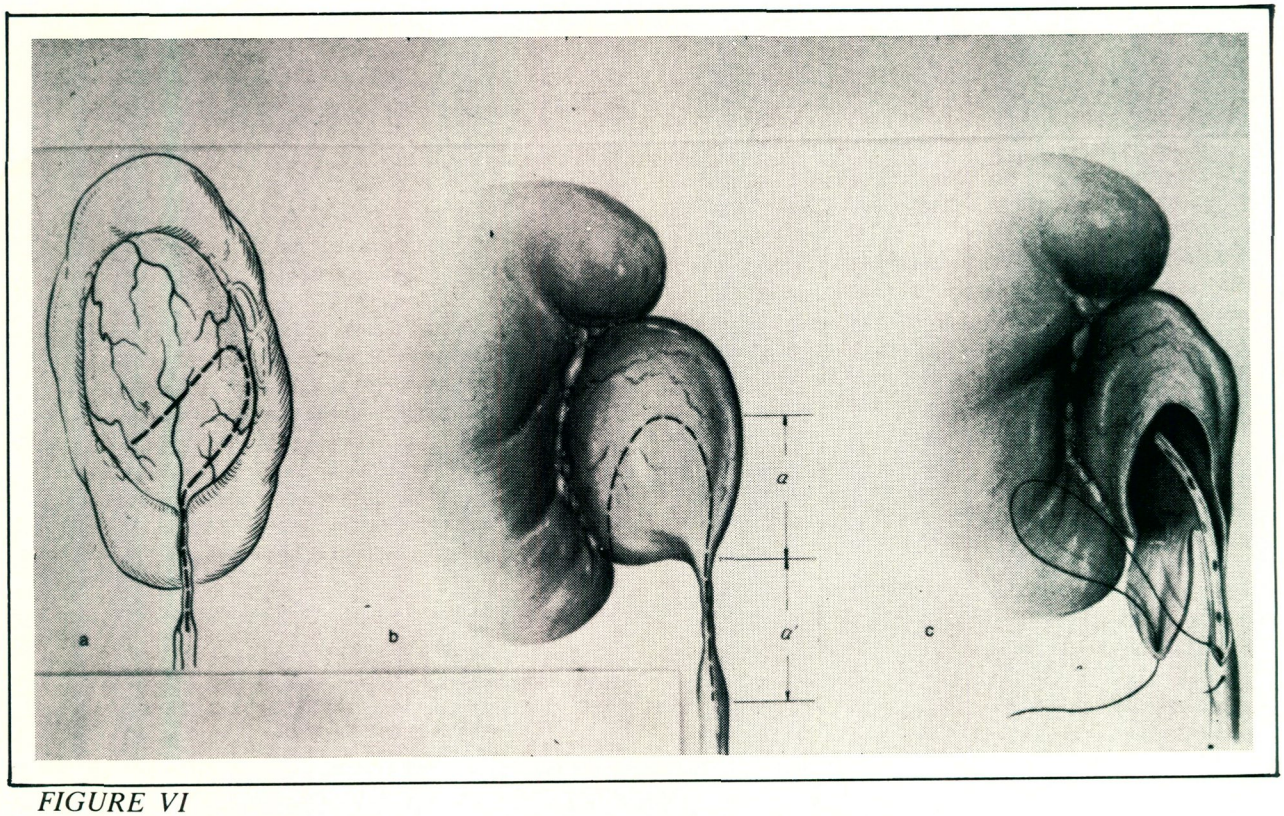


FIGURE VI
Culp-Deweerd-Scardino.

CONCLUSION

Congential Hydronephrosis is a pathological condition which will require surgical correction especially if it is discovered early in life or complicated by haematuria infection or renal calculi. We excluded old age with minimal symptoms and when the complaint was not related to clinical findings.

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