

She was referred to the Surgical Department and right retrograde examination was done on March 24, 1985, it revealed normal bladder with normal ureteric orifices. Injection of 60 c.c. of dilute contrast revealed a displaced non-obstructed right ureter with displaced pelvis of the kidney seen over L4-L5 (Fig. 2).



Fig. 2 Retrograde Pyelogram

24 hours after retrograde, patient developed acute pain in right side of abdomen with distension, vomiting and right sided abdominal tenderness. Postretrograde plain X-ray showed gas collected around the kidney. Laparotomy performed as an emergency through a right paramedian incision revealed oedema and ecchymosis behind the caecum retroperitoneally. The right paracolic gutter was explored and a huge hydronephrotic kidney was found extending from right iliac fossa to right loin. Massively dilated extra renal kidney pelvis was located near L4-L5 with marked stenosis of pelviureteric junction.

No stones were detected. The renal vessels were arising from their normal site of origin. The capsule of the kidney was intimately adherent to the anterior peritonium. Subcapsular nephrectomy was performed.

#### Discussion:

The patient presents two interesting phenomenon.

Firstly, the large kidney, by virtue of its weight descended into the right iliac fossa. It retained its normal blood supply.

Secondly, acute abdominal pain was precipitated by the retrograde pyelography procedure. The possible causes would include probably from aggravation of the tension in an already massively hydronephrotic kidney causing rupture of a thin walled distended calyx. There was definite evidence of extra-vasation with ecchymosis and oedema behind the caecum at the time of laparotomy and a post-retrograde X-ray revealed retroperitoneal collection of air.

A kidney is considered ectopic when it is fixed in a position that is distinctly different from average. It is usually in the iliac fossa, on the brim of the pelvis or on the opposite side. In the congenital form there is a short ureter and abnormal vascular and fascial attachment. When ectopic is acquired and is due to the weight of the kidney secondary to hydronephrosis, tumour, faulty attachment or pressure from without, the ureters are of normal length and show evidence of the descent by bends and tortuosities. The arterial supply of the acquired ectopic kidney arises from the normal levels in the aorta whereas in contrast the arteries to the congenital ectopic kidney usually arise from the adjacent position of the aorta or iliac arteries and rarely from the normal level in the aorta. The veins drain into nearby vessels<sup>1</sup>.

#### REFERENCES:

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## Acquired Ectopic Kidney

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### Abstract :

The case history of a patient with an acquired ectopic kidney is discussed.

**Keywords:** Acquired ectopic kidney—Hydronephrosis

### Case Report :

A 38 year old female presented to the medical out-patient's department with complaints of pain in right flank for the past 15 years, generalized oedema off and on for 7 years and a mass in the right side of abdomen of which she was aware of for the past 5 years. She was a known hypertensive for 7 years, suffering from glaucoma for 1 year and was diagnosed as diabetic 20 days back. She had hysterectomy 7 years ago for fibroids.

Examination revealed a very obese short statured patient who weighed 75 kgs. She had oedema of the face and ankles and a blood pressure of 160/78 mm Hg. Abdominal examination revealed a protruberant abdomen with a mass in right side of abdomen extending from right lumbar region to right iliac fossa. The mass was not bimanually palpable. She had albuminuria (Total protein excretion 216 mg/24 hours), 1-2 RBC and pus cell per HPF and granular cast in the urine. Blood examination showed a hemaglobin of 11 gm/dl, random blood sugar 408 mg/dl, blood urea 40 mg/dl and serum creatinine 1.4mg/dl. Her serum T4 was 8.8 micrograms/100 ml.

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A huge cystic mass (19 x 12 cm in size) was seen in right lumbar region on ultrasound. This was consistent with massive hydronephrosis. However, no stone was seen. The ureter could not be traced. Left kidney was enlarged.

The IVP (Fig. 1) failed to outline the right kidney. The left kidney was normal and showed compensatory hypertrophy.

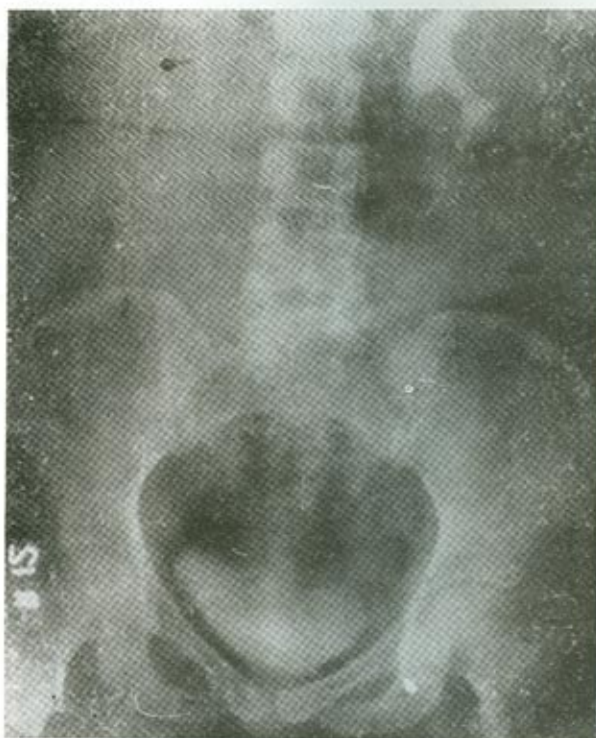


Fig. 1 Intravenous Urogram