Retro-caval ureter in association with pre-auricular skin tag

Sir,

Genitourinary anomalies are known to be associated with external ear anomalies.\(^1\) It has been suggested that all cases of pre-auricular skin tags should undergo renal ultrasound to rule out anomalies.\(^1\) Renal anomalies like unilateral or bilateral renal agenesis, hypoplasia, crossed ectopia, horseshoe, pelvic or cystic kidney, hydronephrosis, duplicated ureters, megaureter or vesicoureteric reflux has been reported.\(^2\)

We report a case of retrocaval ureter in a nine-year-old child, who apparently had a preauricular skin tag and underwent ultrasound of abdomen to rule out renal anomalies by a pediatrician. Ultrasound showed moderate hydronephrosis with moderate upper hydroureter on right side. Intravenous pyelogram [Figure 1] showed dilated pelvicaliceal system on right side with upper ureteral dilatation (and medial deviation) which terminated abruptly at level of L3 vertebra (classical of retrocaval ureter).

A provisional diagnosis of retrocaval ureter was made and child underwent surgery. The ureter was approached through right subcostal extraperitoneal incision. There was a dilated tortuous upper ureter which was deviated medially behind inferior vena cava (IVC) [Figure 2] and was also compressed by a small lumbar vein. Spatulated end to end anastomosis was performed after anteriorising the ureter. A double J stent was inserted and a drain was placed. Postoperative recovery and follow-up of the patient was satisfactory.

Retrocaval ureter is a congenital anomaly in which the right ureter passes behind and gets compressed by an anomaly of inferior vena cava. It was first reported by Hochstetter in 1893.\(^3\) Embryologically, persistence of posterior cardinal vein traps the ureter behind it and also deviates the ureter medial and posterior to IVC.\(^4\) Its prevalence is one in 1000 live births with males outnumbering females in the ratio of 3:1. Alisghar et al.,\(^5\) reported 13 cases of retrocaval ureter. Bateson and Atkinson in 1969 classified retrocaval ureter into two types.\(^6\) According to Kenewis in 162 cases of Retrocaval ureter, 93% were of type 1.\(^7\) Our case was also of type 1.

Patient may be asymptomatic or can have ureteric colic, hematuria, urinary tract infection and stone formation. Diagnosis is by intravenous pyelogram, ultrasound and CT scan being complementary. The treatment depends on symptomatology, degree of hydronephrosis and renal function.

Our patient underwent surgery in order to preserve renal function as he had moderate hydronephrosis. Surgical procedures suggested are uretero-ureteral anastomosis with or without resection of retrocaval segment and nephrectomy. Extraperitoneal or transperitoneal laparoscopic procedures have been used to treat retrocaval ureter.

Our case adds to the association of renal anomalies and preauricular skin tag.
Pushpa Koli, V. V. Dewoolkar
KJ Somaiya Hospital and Research Centre, Everad Nagar, Mumbai, India

Correspondence: V. V. Dewoolkar, K.J.Somaiya Hospital and Research Centre. Everad Nagar, Mumbai, India. E-mail: dewoolkarmedicine@gmail.com

REFERENCES


