

detected on ultrasound and Doppler imaging. Diuretic scintigraphy with ^{99m}Tc -MAG3 has shown symmetrical differential renal function (48 %) and delayed drainage of the radionuclide pointing to a partial obstruction of the right kidney.

The right kidney was laparoscopically exposed in conventional transperitoneal way with three 5mm trocars inserted at umbilicus, above umbilicus in the midline and pararectal to umbilicus. The crossing vessels were released from the enlarged pelvis, UPJ and proximal ureter to enable free movement up and down behind the vessels („shoeshine manoeuvre“). After i.v. liquid infusion, the vessels were elevated from the UPJ region and 10 mg furosemide i.v. was administered. A good passage of urine from the pelvis to the ureter across the UPJ was confirmed. The vessels were wrapped into the pelvic wall well above the UPJ using two absorbable polyglactin 4/0 sutures. Length of surgery 115 min. Stenting was not necessary, therefore, no worry of stent syndrome and of necessity for additional anaesthesia to remove it. Postoperative course was uneventful, pain settled and dilatation

of the pelvicalyceal system decreased at 3- and 12- months follow-up. Doppler imaging showed adequate cranial deflection of the crossing vessels and good perfusion of the kidney.

The laparoscopic vascular hitch was first published by Meng and Stoller in 2003 (6). Several articles have been published proving safety of the procedure. Its success rate ($97,5 \% \pm 1,6 \%$) is comparable with dismembered pyeloplasty (9). The pros are: unstented repair, shorter length of surgery and hospital stay (9, 10).

Conclusions: Laparoscopic transposition of crossing vessels is a good alternative of dismembered pyeloplasty in selected patients with intermittent hydronephrosis once concomitant „intrinsic“ cause of UPJ obstruction has been excluded. It is a stent free procedure with a shorter operative time and shorter hospitalization.

KEY WORDS

Hydronephrosis, ureteropelvic junction obstruction, UPJO, vascular hitch, transposition of renal crossing vessels.

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