

INDICATIONS, TECHNIQUES AND COMPLICATIONS OF URETERIC RECONSTRUCTION: AN 8-YEAR EXPERIENCE

Hypothesis / aims of study

The indications for ureteric reconstruction are changing as surgical practice evolves, but little has been published regarding contemporary experience. We looked at a single institution experience of patients having ureteric reconstruction (UR) over an eight-year period

Study design, materials and methods

Consecutive patients having UR at our institution were retrospectively evaluated. Data was gathered pertaining to indication for UR, management prior to UR, pre and post UR split function, as well as short and long-term complications.

Results

50 renal units were reimplanted in 43 patients. 19 of 50 UR were performed for obstruction, 24 for stricture, 6 for fistula (5 uretero-vaginal, 1 uretero-rectal) and one for recurrent vesico ureteric reflux following previous reimplantation and STING procedures. 16 patients had concurrent procedures to deal with underlying causation. Table 1 shows the main aetiologies.

11 (25.5%) patients had intraoperative complications (4 vascular injuries, 6 bowel injuries, 1 anaphylaxis). All intra-operative complications were treated at time of surgery. Peri operative complications were most common with radiotherapy (44%) and urological surgery (31%) aetiology but did not seem to correlate with the complexity of reconstructive procedure.

Long term complication data was available for 38 patients (mean follow-up 39 months (range 3-100 months). 33 of 43 patients (77%) had split function checked pre and post UR; only 2/33 had deterioration in split function, with only 1 having recurrent obstruction (3%). Non-UR related further surgery was required in 3 (7%) patients (Botox, incisional hernia repair, renal stone treatment,) and UR related further surgery in 2 (5%) (nephrectomy, redo ileo-chute).

	Type of Ureteric Reconstruction (renal units)		
	Re-implant	Boari flap+/-psoas hitch	Bowel Interposition
DXT	2	4	7
Gynaecological surgery	2	6	1
Endometriosis	1	3	-
Obstetric surgery	1	2	-
Urological surgery	7	6	3
BOO	3	-	-
Other (other surgical, schistosomiasis, unknown)	1	2	1

Interpretation of results

Ureteric injuries remain relatively rare in contemporary urological practice and the causes heterogeneous and often complex. Reconstructive surgeons must be able to perform a variety of techniques in order to obtain good functional outcomes.

Concluding message

Intra-operative risks were significant and secondary interventions required in 12%. However improvements in urinary drainage were excellent and durable with only 1 case of recurrent obstruction (2%).

Disclosures

Funding: nil **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** retrospective audit **Helsinki:** Yes **Informed Consent:** Yes