

A REVIEW OF THE INCIDENCE OF URETERO-VESICAL OBSTRUCTION AND COHEN ANTI-REFLUX SURGERY AFTER DEFLUX® TREATMENT FOR VESICO-URETERIC REFLUX.

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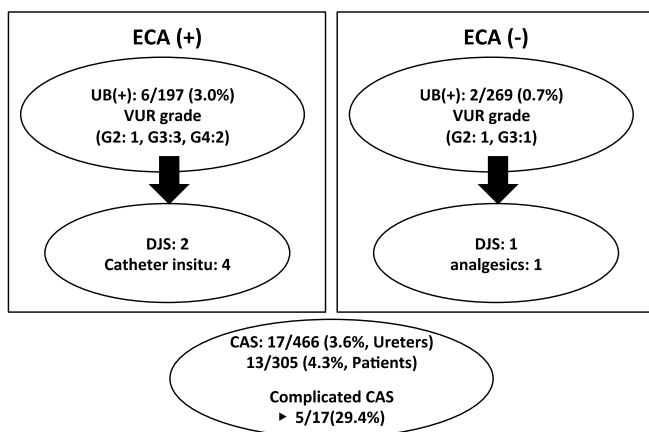
Aim: We reviewed vesico-ureteric reflux (VUR) patients who developed ureteric obstruction (UB) or required Cohen anti-reflux surgery (CAS) after Deflux® treatment (DT) for vesico-ureteric reflux (VUR).

Methods: 466 ureters in 305 patients (male:female 171:134; mean age: 4.8 years; range: 0.2-24) with VUR (< grade III: n=295 or >grade IV: n=171) treated by DT between 2011 and 2016 with epidural catheter assistance (ECA+; n=197 ureters in 130 patients) or without (ECA-; n=269 ureters in 175 patients) were reviewed. ECA involves inserting an epidural catheter into the ureter, injecting diluted indigo carmine solution (1-3mL) into the catheter, and observing for dye flow for at least 15 minutes to exclude UB.

Results: The figure summarizes our findings. In ECA+, UB was detected in 6 ureters in 6 patients (VUR II in 1, III in 3, and IV in 2); 4 were reassessed after leaving the catheter insitu overnight; 2 had a double J stent (DJS) inserted for 1 month. None had UB or VUR after mean follow-up of 1.9 years although 1 grade III DJS case has residual grade II VUR. Incidence of UB in ECA+ was 6/197 ureters (3.0%), which is higher than reported in the literature (0.6-1.8%).

In ECA-, there were 2 cases of UB; one post-DT grade 2 hydronephrosis developed pain after DT that resolved with analgesics 2 days later, and one 1.5 years after DT, requiring DJS. CAS was required for failed DT in 17/466 (3.6%) ureters or 13/305 (4.3%) patients. Previous DT hindered CAS in 5/17 (29.4%) ureters. VUR was cured in all ureters after CAS without sequelae after mean follow-up of 1.8 years.

Conclusions: We are the first to suggest that UB may be more frequent than reported (3% versus 0.6-1.8%) and that ECA may treat/prevent UB. Previous DT complicates CAS but not affect outcome.



ECA: epidural catheter assistance

UB: ureteric obstruction

VUR: vesico-ureteric reflux, G:grade, DJS: double J stent, CAS: Cohen anti-reflux surgery