

# **EVALUATION AND TREATMENT OF THE MALFUNCTIONING OBSTRUCTED DISTAL URETER ASSOCIATED WITH OTHER CONGENITAL ABNORMALITIES**

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## **SUMMARY**

The short distal ureter has an important function in the drainage of urine. I have reviewed the anatomy, physiology and pathophysiology of the distal ureter. I have also retrospectively examined the patients operated with distal ureteral anomalies in the past 20 years (conservative and/or surgery therapy, follow-up).

In the past 20 years (between September 1987 and June 2007) 337 surgeries were performed for distal ureteral congenital anomalies. Between September 1987 and August 1997, the patients were operated at the BAZ County Hospital, Postgraduate Institute of Pediatrics, Department of Pediatric Surgery. Following that period all children were operated at the Debrecen University, Department of Pediatrics, Pediatric Surgical Unit.

In cases of organic UV-stenosis, we have performed isotope examinations of ureter to delineate the ureteral peristalsis. This examination has been in our practice since 2001. This is a new dynamic kidney isotopic examination which helps in establishing the diagnosis and in postoperative cases, identifies the ureteral peristalsis. In 20 children, 29 ureters were examined.

Experimental examinations were carried out on 15 dogs of 2-4 years of age. 9 cases underwent Politano-Leadbetter-type, 9 cases Cohen-type and 8 cases has Gregoir-type neoimplantation. Ureter excision and neoimplantation was performed in 7, plication without excision in 6 dogs were undertaken. In all cases of ureteral neoimplantation, ureteral stenting, following Politano-Leadbetter, Cohen and Gregoir surgeries, distal ureteral microcirculation was evaluated using laser Doppler 1 and 10 months following surgery.

Intraoperative measurements revealed that Cohen-type neoimplantation causes least damage to the microcirculation. Stents placed into the ureter do cause damage to the ureteral microcirculation distally.

Ureteral tapering performed with plication without excision leads to best results and causes least reduction into the distal ureteral microcirculation.