**BILATERAL VESICO-URETERAL REFLUX IN PATIENT WITH CROSSED RENAL ECTOPIA AND FUSION TYPE A**


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**Introduction.** Crossed renal ectopia with fusion is a very rare congenital anomaly and the reported incidence varies between 1:1000 and 1:7000. The kidney is located on the opposite side of the midline from where the ureter enters the bladder. Eighty-five percent of crossed renal ectopia kidneys are fused from below to the normally located kidney. This anomaly is more frequent for left kidney and it’s associated with vesico-ureteral reflux (VUR) in 25-70% of cases. We report the management of a six-years-old patient with Plurimalformative Syndrome, trisomy p16 and monosomy q2, crossed renal ectopia with fusion type A and bilateral vesico-ureteral reflux (grade IV in the right kidney and grade III in the left).

**Materials and Methods.** A 6-year-old boy was admitted to our hospital for UTI in plurimalformative syndrome characterized at birth by cleft palate, macrocephaly, congenital clubfeet, twisted right arm, congenital dysplasia of the hip, balanic hypospadias, bilateral inguinal hernia, right renal agenesis and epilepsy tonic-clonic. MRI revealed a fusion of the ectopic kidney with the left orthotopic kidney (crossed renal ectopia with fusion type A). Voiding cystography showed a dilated ureter of the crossed ectopic kidney passing across the midline and of the left ureter, and a bilateral vesico-ureteral reflux (grade IV VUR in the right kidney and grade III VUR in the left). For this reason bilaterally endoscopic subureteral infiltration was performed with Deflux (0.3 cc for side).

**Results.** Patient was discharged in third day and he took antibiotic for one week. There weren’t complications like fever, obstruction or UTI. Follow-up after 1 month is normal and there weren’t UTI.

**Conclusion.** Generally the outcome of patients with fused crossed renal ectopia is good. Presence of associated pathology like VUR, could lead to a progressive deterioration of renal function. Therefore, in patient with uninhabited kidney area and UTI, it’s very important a careful radiological investigation to exclude a renal ectopy complicated by RVU and especially to realize an appropriate treatment strategy before the patient develops a chronic renal failure. Endoscopic infiltration with Deflux, in our case, was detected a viable surgical technique for its minimally invasiveness and also for its efficacy with a relatively short hospital stay.

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**FEMALE EPISPADIAS: A CASE REPORT AND REVIEW OF THE LITERATURE**

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Female epispadias without bladder extrophy is an extremely rare anomaly, occurring in 1 in 480,000 female population. It’s the mildest form of the extrophy-epispadias-complex (EEC), that is the most serious form of abdominal midline malformation (incidence of EEC can be estimated at 1 in 10,000 births). It’s imperative to diagnose this abnormalities at birth, because that’s enough a complete local examination and a good patient’s past medical history, when the patient is greater, about congenital urinary incontinence and recurrent urinary tract infection. The early diagnosis, so the early treatment, is very important to reduce the psychological and psychosocial problems and prevent the urinary incontinence, that’s a real problem for the social life of the patient. The pathology can be corrected by surgical reconstruction of bladder neck, urethra and external genitalia. Epispadias surgery is a reconstructive surgery and it has mainly two aims: the correction of the urinary incontinence and the reconstruct of the external genitalia with good aesthetic appearance. In this case report we present a 3-years-old girl with isolated female epispadias, who underwent just one operation to correct her anomaly. In this patient the epispadias was unrecognized until 1 years-old. We reviewed, also, the Literature about cases of female epispadias that confirmed the rarity of the disease.

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**TREATMENT OF KERATOCONUS, DOUBTS ABOUT THE MECHANISM OF ACTION AND IMPEDIMENTS TO DISCUSSION**

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In an experimental study on keratoconus (G. Wollensak et al., “Stress-strain measurements of human and porcine corneas after riboflavin-ultraviolet-A-induced cross-linking”, J Cataract Refract Surg 29 (2003) 1780-1785), the authors observed that when strips of corneal tissue were stretched at constant elongation velocity, they responded with strain that increased according to an exponential fitting curve. This behaviour was qualified as “the typical exponential increase of a bioviscoelastic solid”. This claim is wrong and misleading, because typical viscoelastic behaviour is asymptotic, not exponential, as we have already pointed out (A. Albanese et al., "Keratoconus, cross-link-induction, comparison between fitting exponential function and a fitting equation obtained by a mathematical model", Biomedicine & Pharmacotherapy 63 (2009) 693-696). Other doubts are raised by the unjustified choice of fitting function, the surprising agreement of the experimental points with the curve (in contrast to the wide margins of error indicated) and finally the original criterion used for data processing. The fact that treatment is clearly effective does not prove that the mechanism of action is the one described in the above paper. We therefore consider it advisable to conduct further research into the real biomechanical properties of corneal tissue, because erroneous interpretation could make it more difficult to develop and direct therapies. This summarizes the contents of a paper that we submitted to the journal in November 2009, but which fails to be accepted on the pretext of formal minutiae. We believe that in specialist journals scientific disputes should be solved by an exchange of arguments. Shilly-shallying to deny space for critical observations does not favour the advance of science.

**Keywords:** cornea, keratoconus, viscoelasticity