

The Comparison Between Efficacy of Tamsulosin Alone or in Combination with Corticosteroids vs Corticosteroids Alone vs Analgesics in Spontaneous Passage of Distal Ureteral Stones: Results of a Prospective Study

Introduction and Objectives: The objectives of the study were to evaluate and compare the efficacy of tamsulosin alone vs tamsulosin + prednisone vs prednisone alone vs analgesics in determining the spontaneous passage of distal ureteral stones 1cm or less, to determine the number of endourological procedures saved and to observe toxicity

Materials and Methods: From September 2008 to February 2011, 145 patients (pts) with renal colic admitted to the emergency departments of 2 urological centres were recruited in this prospective, not randomised study. Diagnosis of distal ureteral stones was obtained with x-ray of the abdomen and CT. After a signed informed consent pts received 4 therapeutic regimens: 40 pts (group A) tamsulosin 0.4mg/d alone, 35 pts (group B) prednisone 25mg/d x5 days, 10mg x 5 days and 5 mg x 5 days, 45 pts (group C) tamsulosin 0.4mg + prednisone (same schedule). Finally 25 pts (group D) received analgesics (ketoralac orally 1-2 /day or tramadol 1 injection in case of allergy or if > creatinine). Therapy was prescribed at home for 15 days in all the pts. Exclusion criteria were: diabetes, hypotension, complicated stones (fever, pyonephrosis), recurrent colics non responding to medical treatment and requiring emergency endoscopic procedures. We evaluated: a) spontaneous stone passage rate b) endo-urolological procedures required (ureteroscopy + laser treatment, JJ) c) side effects

Results: The mean pts age was 44.7, 49.2, 42.3 and 47 years for pts in group A, B, C and D, respectively. All the stones were in the distal part of the ureter. The mean diameter of the stones was: 7.3 mm (3-10mm), 4.2 mm (2.7-7.5mm), 7mm (4-10mm) and 5.3mm (3-8mm) in group A, B, C and D respectively. Three pts in group A and 3 pts in group B were lost to follow-up. Spontaneous passage of the stone was: 67.5% (23/37), 34.2% (12/35), 92.8% (39/42) and 28% (7/25) in group A,B,C and D respectively. Endourological procedures (ureteroscopy with laser lithotripsy and JJ) were used in 33.5% , 65%, 7.8% and 72% in group A,B,C and D respectively. There were 3/37 pts in group A (8.1%) and 2/42 pts in group C (4.7%) who had to stop medical treatment for hypotension and malaise vs 0 in group B and D.

Conclusions: The combination therapy (tamsulosin + prednisone) resulted in the most effective treatment for spontaneous passage of distal ureteral stones (93%) and determined a significant reduction in endourological procedures (8% vs 33%-72%). Side effects were observed in about 5%.