

A prospective randomized study comparing the efficacy of tamsulosin and placebo in the management of acute urinary retention secondary to benign prostatic hyperplasia until definitive therapy.

ABSTRACT

INTRODUCTION;

Acute urinary retention (AUR) is a common urological emergency in men and is defined as a sudden and painful inability to pass urine voluntarily. In most cases, no triggering event is identified and the AUR is attributed to the natural history of benign prostatic hyperplasia (BPH). Management of AUR involves immediate bladder catheterization usually followed by prostatic surgery, with a greater morbidity and mortality associated with emergency surgery (within few days after AUR) and the potential morbidity associated with prolonged catheterization (bacteriuria, fever, urosepsis).

To the date, the first line of treatment in these patients is the use of a trial without catheter (TWOC) with a previous administration of an alpha-blocker that should increase the likelihood of success.

AIM

To compare the efficacy of tamsulosin and placebo in the immediate management of patients with acute urinary retention secondary to benign prostatic hyperplasia undergoing trial without catheter and assess effect of tamsulosin in the success rate of trial without catheter with respect to prostate size, patient age and post void residual.

METHODS

Patients with acute urinary retention due to BPH (total 74), were catheterized and randomized into two groups: Group A; Tamsulosin 0.4mg (37 patients), Group B: Placebo (37 patients). After four days, catheter was removed and patients were put on TWOC. A TWOC was considered successful if the patient had voided volume more than 100 ml and post-void residual urine less than 200 ml.

RESULTS: TWOC was successful in 59.5% (22) of tamsulosin group (group A) and 32.4% (group B) in placebo group. Statistical analysis showed that tamsulosin is effective and increases the success rate of TWOC (P= 0.020) with an odds ratio of 3.056 for placebo group. Patient age and Prostate size significantly influenced TWOC success rates. Tamsulosin increased the success rate of TWOC in patients with larger prostate (P=0.005) and in older patients (statistically not significant P=0.129). Post void residual urine is significantly

(P=0.032) reduced (163.51 ml vs 212.97 ml) by addition of tamsulosin in patients with acute urinary retention undergoing trial without catheter.

CONCLUSION

Tamsulosin increases the success rate of trial without catheter in patients with acute urinary retention particularly in patients with larger prostate and in older age group when compared with placebo. Post void residual urine is significantly reduced by addition of tamsulosin in patients with acute urinary retention undergoing trial without catheter.

KEY WORDS; Acute urinary retention, Trial without catheter, Tamsulosin, Prostate size and Age in TWOC, Post void residual, Efficacy of tamsulosin in TWOC success rate.