Evaluate the Efficacy of Alpha Blockers for Expulsion of Distal Ureteric Calculus

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Abstract: To evaluate the efficacy of Alpha blockers for expulsion of distal ureteral calculus.

To compare the efficacy of Tamsulosin (Receptor Sub Selective Alpha blocker) with Alfuzosin (Receptor non Sub selective Alpha blocker) in the management of distal ureteral calculus.

I. Introduction

The lifetime prevalence of kidney stone disease is estimated at 1% to 15%, with the probability of having a stone varying according to age, gender, race, and geographic location. Most stones become symptomatic when they fall into the ureter, causing pain or obstruction. The goal of management of patients suffering from ureteral calculi is to achieve complete stone clearance with minimal attendant morbidity.

II. Headings

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III. Indentations And Equations

The goal of management of patients suffering from ureteral calculi is to achieve complete stone clearance with minimal attendant morbidity. Treatments for distal ureteric stones include watchful waiting, ESWL, Ureteroscopy, and open ureterolithotomy. Various medications used to enhance the stone passage. It had been demonstrated that α adrenoreceptors antagonists, given to patients suffering from renal colic, due to distal ureterolithiasis, had increased the frequency of stone expulsion rate, reduced the time to expulsion, and reduced analgesics consumption.

IV. Discussion

150 Patients were included in the study. Patient were categorized into 3 groups. A Group Patients were given Placebo, B Group Patients were given Tamsulosin 0.4 mg/day and C Group Patients were given Alfuzosin 10 mg/day. Analgesics 100 mg SR tablets were given on demand. Each group comprised of 50 patients. Mean age group of the patient were in Placebo (Group A) 27.0 years (range between 18-45 years), Tamsulosin (Group B) 26.8 years (range between 18-45 years) and in Alfuzosin (Group C) 25.4 years (range between 18-41 years).

Right side : Left side ratio in Placebo (Group A), Tamsulosin (Group B) and in Alfuzosin (Group C) found to be 1.08:1, 1.08:1, 1.6:1 respectively. Mean calculus size were in Placebo (6.98 ± 1.6 mm). in Tamsulosin (6.34 ± 1.7 mm) and in Alfuzosin (6.7 ± 1.5 mm). The size of calculus were found to be equally distributed in all 3 groups. Patients had colicky pain for about 1.8 days before presentation, duration ranged in between (1-5 days).

V. Conclusion

- Alpha blockers (Tamsulosin, Alfuzosin) improve the spontaneous expulsion rate of distal ureteric calculus.
- There is no difference in distal ureteric calculus expulsion rate between Tamsulosin, and Alfuzosin.
- Alpha blockers reduce the analgesic requirements but not the calculus expulsion time.

Acknowledgements

An acknowledgement section may be presented after the conclusion, if desired.

References