

Efficacy of Tamsulosin in the management of lower ureteral stones: A randomized double-blind placebo-controlled study of 100 patients

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Objective: To study the impact of tamsulosin on the rate of spontaneous passage of distal ureteral stones.

Methods: A total of 100 patients with stones sized 10 mm or smaller, located in the distal part of the ureter were included. Patients were randomly assigned to 2 equal groups. Group 1 received 0.4 mg tamsulosin once daily and group 2 received placebo. The investigators and the patients were masked to the type of treatment. Patients were followed-up until passage of the stone, or for a maximum of 4 weeks. The number of pain episodes, need for analgesia, stone expulsion rate and time, and possible side effects of medications were observed in both groups.

Results: Apart from 4 patients in the placebo group who were lost to follow-up, all patients complied with the prescribed medications and continued the study. Stone expulsion occurred in 41 of 50 patients (82%) in group 1 and in 28 of 46 patients (61%) in group 2 (P .02). The chance of stone expulsion was 3 times higher in the tamsulosin group (relative risk [RR] 2.93; 95% CI, 1.152-7.45). In group 1, patients with stones sized 5 mm showed a significantly higher expulsion rate compared to those with larger stones (5 mm). Age, gender, and stone laterality had no significant impact on the expulsion rate. The expulsion time was significantly shorter in the tamsulosin group (6.4 2.77 days vs 9.87 5.4 days for groups 1 and 2, respectively). Moreover, the frequency of pain episodes, the need for diclofenac, and its total dosage were significantly lower in the tamsulosin group. Side effects observed in both groups were comparable and mild, and no patient withdrew because of them.

Conclusions: Tamsulosin is a safe and effective drug that enhances spontaneous passage of distal ureteral stones sized 10 mm or smaller.

Figure 1.

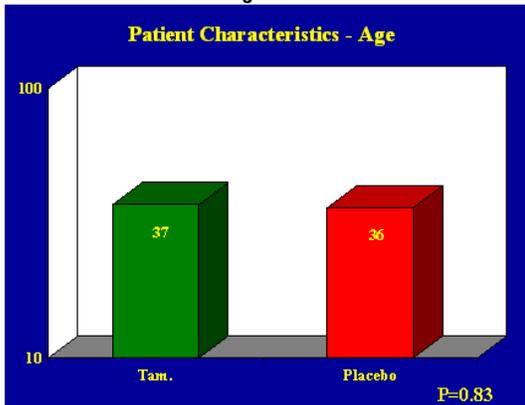


Figure 2.

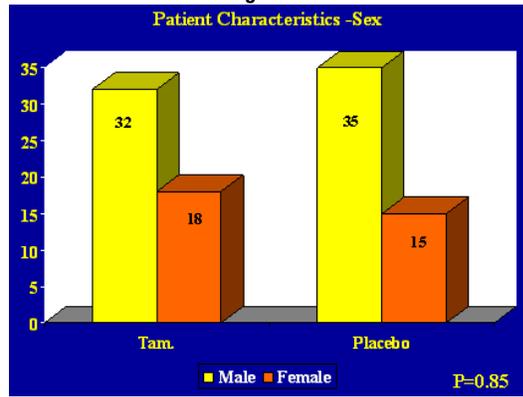


Figure 3.

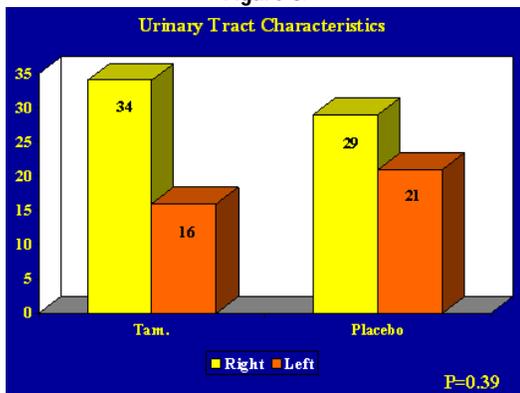
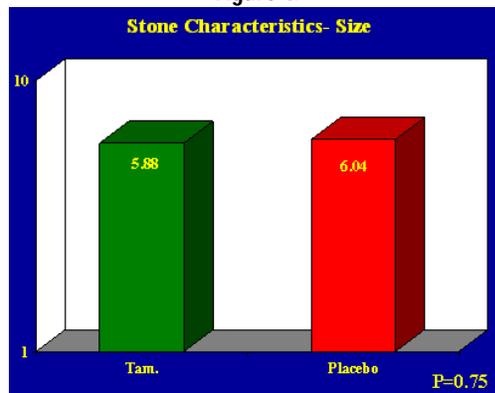
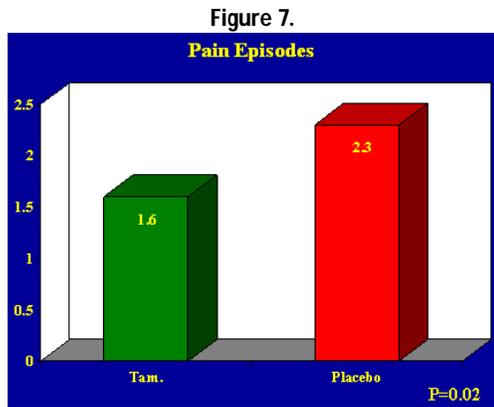
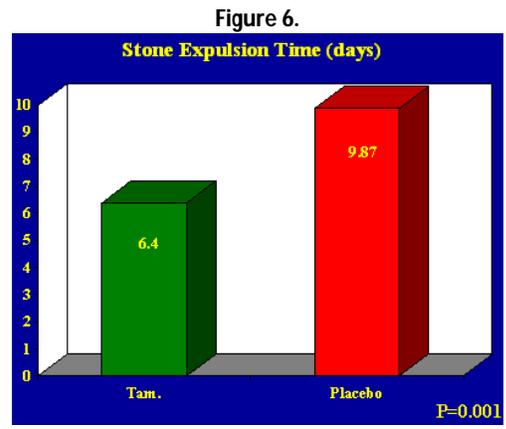
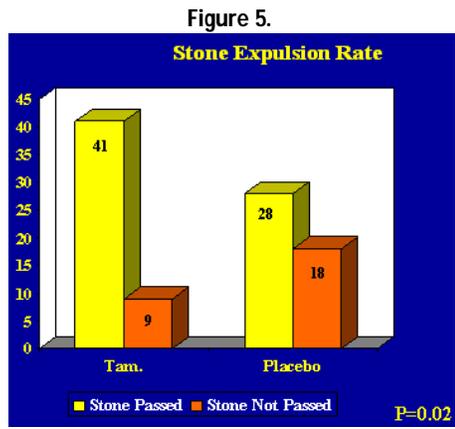


Figure 4.





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