Tamsulosin and terpenes in the treatment of ureteral stones

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Introduction: Medical expulsion therapy (MET) facilitates ureteral stone passage in patients who have a newly diagnosed ureteral stone <10 mm and whose symptoms are controlled. However, large-scale trials and the investigation of promising new substances are still needed to optimize the role of MET. Some medicinal plants contain Terpenes, which help in ureteral stone expulsion. Urolesan (complex phytodrug manufactured by Galichpharm, Ukraine) is one of them.

Our aim was to examine Urolesan as one of components MET in the treatment of ureteral stones.

Material and Methods: Fifty one patients (26 men and 25 women) who were referred to our city center with acute renal colic and definite evidence of ureteral stones were included in the study. The patients with distal ureteral and middle ureteral stones (<10 mm) were randomized into two groups. After randomization, they were followed for stone expulsion. We compared the efficacy of treatment and spontaneous stone expulsion rate among two groups: group 1 – Urolesan + Tamsol (tamsulosin) + NSAID (Diclofenac sodium) and group 2 (standard treatment group) – Tamsol (tamsulosin) + NSAID (Diclofenac sodium).

Results: The collected data of the investigation demonstrate significantly higher rates of treatment success in the Urolesan group compared to standard treatment group (75.9% vs 63.6%), despite a larger stone diameter in the Urolesan group (5.14 vs 3.66 mm). The mean time to stone expulsion was shorter in the Urolesan group (13.9 days vs 15.2 days). The need for additional analgesic drugs was reduced in the 1st group in comparison with the 2nd group (4.24 vs 8.93). The significant difference was detected in terms of the incidence of renal or ureteral colic among the two groups (8.48 vs 13.6).

The documented adverse effects include retrograde ejaculation, stuffy nose, trouble sleeping and weakness. The numbers of these events were equal in both groups and we have suggested that they are more characteristic for α-blockers (tamsulosin).

Conclusion: Obtained data of the investigation allow concluded that Urolesan has advantages in overall stone-free status and the treatment with Urolesan may lead to accelerated stone expulsion and to control symptoms that reduce the need of additional analgesic drugs. Therefore, MET with α-blocker (Tamsol) and Urolesan resulted in accelerated and higher expulsion rates compared with a control (standard treatment) group. These findings allow concluded that Urolesan may be used as a supportive drug in stone expulsive therapy.

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