

Alpha-blockers effective for ureteral stones

Clinical Question	How effective are alpha-blockers in adult patients presenting with symptoms of ureteral stones less than 10 mm confirmed by imaging?
Bottom Line	Compared to standard therapy, calcium channel blockers or placebo, alpha-blockers resulted in a higher stone-free rate and a shorter time (2.91 days) to expulsion, and therefore decreased the duration of symptoms and rate of complications (UTI, hydronephrosis and impairment of kidney function). Alpha-blockers slightly reduced the number of pain episodes and the need for analgesic medication and hospitalisation. Side effects were more present in the alpha-blockers group; most adverse effects were mild and did not lead to cessation of therapy.
Caveat	29 of the 32 studies involved patients with distal ureteric stones. In only seven studies were patients and doctors both blinded. In the other studies, blinding was not described in the methods or no blinding had taken place. Two studies described incomplete data and only one study showed a relatively high number of patients who withdrew from the study. These factors limited the methodological strength of the evidence found.
Context	Urinary stone disease is relatively common, affecting about five to 10% of the population. Annual costs for stone disease have rapidly increased over the years and most patients with ureteral colic or other symptoms seek medical care.
Cochrane Systematic Review	Campschroer T et al. Alpha-blockers as medical expulsive therapy for ureteral stones. Cochrane Reviews, 2014, Issue 4. Art. No.: CD008509.DOI: 10.1002/14651858. CD008509.pub2. This review contains 32 studies involving 5,864 participants.
