Use of drug therapy in the management of symptomatic ureteric stones in hospitalised adults: a multicentre, placebo-controlled, randomised controlled trial and cost-effectiveness analysis of a calcium channel blocker (nifedipine) and an alpha-blocker (tamsulosin) (the SUSPEND trial)

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Declared competing interests of authors: Professor John Norrie is a member of the National Institute for Health Research Health Technology Assessment Commissioning Board and a member of the National Institute for Health Research Efficacy and Mechanism Evaluation and Health Technology Assessment Editorial Boards.

Published August 2015
DOI: 10.3310/hta19630
Plain English summary

Drug therapy in the management of symptomatic ureteric stones
Health Technology Assessment 2015; Vol. 19: No. 63
DOI: 10.3310/hta19630

NIHR Journals Library www.journalslibrary.nihr.ac.uk
Plain English summary

About 5% of people suffer from kidney stones that pass down the urine drainage tube (ureter) into the urinary bladder and cause episodes of severe pain (ureteric colic). People with ureteric colic have to attend hospital for pain relief and diagnosis. Although most stones smaller than 10 mm eventually reach the bladder and are passed during urination within 4 weeks, some get stuck and have to be removed using telescopic surgery or shockwave therapy. Previous studies suggest that if people with ureteric colic are treated with drugs that relax the ureter, such as tamsulosin hydrochloride (Petime, TEVA UK Ltd) or nifedipine (Coracten®, UCB Pharma Ltd), they are more likely to pass their stone without any further procedures. To see if these drugs really work, we carried out a study involving over 1000 patients with ureteric colic. We divided the patients who agreed to take part into three groups, which were treated with either tamsulosin, nifedipine or placebo (pill without active ingredients) for 4 weeks. The treatment each person received was decided by a computer program (random allocation), and the patients and the doctors caring for them did not know which treatment they were taking. We counted how many patients in each group had further procedures to remove the stone. We found that eight out of every 10 (80%) patients in all the groups did not need any procedures during the 4 weeks, with no differences between the tamsulosin, nifedipine and placebo groups. Our conclusion was that giving tamsulosin or nifedipine for 4 weeks to people with ureteric colic is not worthwhile.
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This report

The research reported in this issue of the journal was funded by the HTA programme as project number 08/71/01. The contractual start date was in June 2010. The draft report began editorial review in November 2014 and was accepted for publication in April 2015. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors’ report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

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