Methenamine hippurate compared with antibiotic prophylaxis to prevent recurrent urinary tract infections in women: the ALTAR non-inferiority RCT

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Plain English summary

The ALTAR non-inferiority RCT

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Plain English summary

Women with recurrent urine infections often require preventative treatment to reduce the frequency of infection episodes. Daily low-dose antibiotic medication is a guideline-recommended treatment option for these women. There is increasing concern globally regarding antibiotic-resistant infections, which has led researchers to look at alternative treatments. This trial was conducted to find out whether or not taking an alternative treatment that is not an antibiotic [i.e. methenamine hippurate (Hiprex®; Mylan NV, Canonsburg, PA, USA)] was as effective as the standard daily low-dose antibiotics.

A total of 240 women from across the UK took part in the trial. They were divided equally into two groups; half of the women were given methenamine hippurate and the other half were given standard low-dose antibiotics. Both treatments were prescribed to be taken every day for 1 year. To make a fair comparison, people were put into the two groups at random using a computer program.

Aspects of the trial that could be improved were identified through telephone interviews with patients and recruiting staff. Feedback from these telephone interviews helped to ensure the successful conduct of the trial.

Patients were followed up for 18 months, comprising the 12 months when they were taking treatment and a 6-month follow-up phase after they had finished treatment. We found that the non-antibiotic option of methenamine hippurate was no worse than the current standard treatment of daily antibiotics in preventing urinary tract infection episodes in adult women. For both treatments, patients expressed high levels of satisfaction. One advantage of the methenamine hippurate treatment was that infecting bacteria were slightly less likely to develop resistance to antibiotics. We also evaluated health-care costs of both treatments and found that methenamine hippurate seemed worthwhile to the NHS in the short term, but there was uncertainty over longer-term costs and benefits. These results will help patients with repeated urinary tract infections to decide on treatment options, particularly if they want to avoid prolonged courses of preventative antibiotics.

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This report

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