Continuous low-dose antibiotic prophylaxis to prevent urinary tract infection in adults who perform clean intermittent self-catheterisation: the AnTIC RCT

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Plain English summary

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Plain English summary

People who have trouble emptying their bladders naturally often use a fine tube (catheter) inserted through the urine channel (urethra) into the bladder to drain urine 3–5 times a day. This is called clean intermittent self-catheterisation (CISC). About one-third of people who use CISC suffer frequent urinary tract infections (UTIs) that require antibiotic treatment. The repeated use of antibiotics may cause side effects and result in bacteria becoming resistant to antibiotics.

This trial was conducted to find out whether or not taking a daily low dose of antibiotic (prophylaxis) over 12 months was better than not taking prophylaxis in reducing the rate of infection for people carrying out CISC who suffer from repeated UTIs.

A total of 404 people took part in the trial. They were divided into two groups: 203 people took prophylaxis and 201 people did not. To make a fair comparison, people were put into the two groups at random using a computer program. We followed those who took part for 12 months and counted how many UTIs they suffered.

We found that people taking prophylaxis had half as many UTIs as those who did not use prophylaxis. The use of prophylaxis seemed worthwhile to patients and the NHS, with few side effects and only a small additional cost. Taking prophylaxis did not seem to improve overall well-being. This appeared to be because participants felt that UTI, although unpleasant, was not as bad as other health problems that they had to deal with. The main drawback was that infecting bacteria were more likely to develop resistance to antibiotics in people taking prophylaxis, making it more difficult to treat infection in those individuals and threatening public health. These results will help patients using CISC who suffer from repeated UTIs to decide whether or not taking prophylaxis is right for them.
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