

Urodynamics tests for the diagnosis and management of bladder outlet obstruction in men: the UPSTREAM non-inferiority RCT

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Plain English summary

The UPSTREAM non-inferiority RCT

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Plain English summary

After hospital referral, men with bothersome lower urinary tract symptoms (LUTS) are assessed with standard tests. These include measurement of urine flow rate, bladder diaries and questionnaires, including the International Prostate Symptom Score (IPSS). UPSTREAM (Urodynamics for Prostate Surgery Trial; Randomised Evaluation of Assessment Methods) researched whether or not including an extra test, urodynamics (UDS), helps when considering treatment options. UDS is a more invasive test and measures pressure in the bladder to check whether or not the prostate is causing obstruction. It was presumed that, if there is no obstruction, surgery would not be offered, so that using UDS would reduce the number of prostate operations.

Each man participating (820 in total) was assessed with the standard tests. Around half of them had no extra tests (the 'routine care' arm of the trial); the rest had the UDS tests (the 'UDS' arm). Men then went on to have treatment, which they chose having discussed their test results with a urologist. IPSS and other symptom scores were examined for each man 18 months after joining the trial. At 18 months, surgery outcomes were known for 792 men and IPSS was known for 669 men.

We investigated if the two trial arms showed similar changes in the IPSS and if there were fewer operations done in the UDS arm. We identified similar reductions in the IPSS in both arms. However, UDS tests did not reduce the number of operations. Analysing all the costs, it was found that a pathway including UDS costs more than routine care.

Interviews were conducted that showed that men found UDS acceptable, and that the additional information helped both the men and their doctors consider which treatment would be most appropriate.

These results do not support the routine use of UDS in the assessment of every man considering prostate surgery for LUTS. Further exploration of the data may identify circumstances in which UDS could be helpful.

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This report

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