Thulium laser transurethral vaporesection versus transurethral resection of the prostate for benign prostatic obstruction: the UNBLOCS RCT

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Plain English summary

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A n enlarged prostate can make it difficult, or even impossible, for a man to pass urine by blocking the urine flow from the bladder. This can cause significant problems, and 25,000 men in the UK each year are treated with an operation to relieve their symptoms.

The standard operation [transurethral resection of the prostate (TURP)], which uses electricity to shave off the enlarged prostate, is successful, but it can have some complications. There is some evidence to suggest that laser surgery can lead to less blood loss and a shorter stay in hospital, but laser operations can be difficult for surgeons to carry out. This trial has looked at a procedure using a new type of laser called thulium, which uses a very similar surgical technique to TURP and has shown promising results so far.

A total of 410 men needing a prostate operation received either TURP or a laser operation. Participants were unaware of which operation they received until the end of the study to ensure a fair comparison. Seven hospitals across the UK were involved over 4 years. The trial mainly assessed the benefits of the operations using a urinary symptom questionnaire completed by participants, and by measuring the speed of passing urine after surgery.

Overall, both procedures achieved positive results, and participants expressed high levels of satisfaction with the outcomes. Participants who had either operation reported a similar improvement in urinary symptoms in their questionnaires. However, although both operations did a good job of improving the speed of passing urine, TURP was better. Participants experienced few complications, and the complications that did occur were similar after both operations, including levels of bleeding and time spent in hospital. The cost of the two operations to the NHS was also similar. Overall, we concluded that both operations are suitable for patients with prostate enlargement, with TURP showing some minor additional benefits.

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This report

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