Surgical treatments for women with stress urinary incontinence: the ESTER systematic review and economic evaluation

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Plain English summary

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Plain English summary

Urinary incontinence, defined as involuntary leakage of urine, is a common condition that varies in type and severity and can have a huge impact on the quality of life of women. The aim of this project was to summarise the evidence on the clinical effectiveness, safety and cost-effectiveness of nine surgical operations for stress urinary incontinence in women and assess the need for further research. Women's preferences for surgery were also explored. Currently there is no agreement among decision-makers, doctors and patients about which of the available surgical operations is best.

Based on previous Cochrane reviews, the effects and safety of each operation were systematically reviewed and analysed. Their cost-effectiveness and the value of conducting further research were also evaluated. To better understand the preference of women, an online survey containing a discrete choice experiment was conducted. Finally, patient representatives were consulted to help us to understand the consequences of the findings from a patient's perspective.

The evidence on surgical operations was predominantly short to medium term (up to 12 months). This analysis found that the quality of the evidence varied, with the majority of trials being subject to high or unclear risk of bias, making the conclusions that can be drawn less robust. The findings of the clinical evidence review suggest that retropubic sling procedures, transobturator sling procedures and traditional sling procedures are more effective than other surgical procedures for both 'cure' and 'improvement' of stress urinary incontinence. The results of the economic analyses support these findings, suggesting that retropubic mid-urethral sling is the most cost-effective surgical operation. However, data on complications were lacking, limiting any strong conclusions. The results suggest that there is value in undertaking further research to reduce the uncertainty around the medium- to long-term complications of all surgical treatments and this was reflected in patients' views.

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