Surgery for stress urinary incontinence in women

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

NICE Pathway last updated: 20 July 2017

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.
1  **Woman aged 18 or over with stress urinary incontinence**

No additional information

2  **Considerations before offering surgery**

If stress incontinence is the predominant symptom in mixed UI, discuss with the woman the benefit of conservative management including OAB drugs before offering surgery.

After undertaking a detailed clinical history and examination, perform multi-channel filling and voiding cystometry before surgery in women who have:

- symptoms of OAB leading to a clinical suspicion of detrusor overactivity, or
- symptoms suggestive of voiding dysfunction or anterior compartment prolapse, or
- had previous surgery for stress incontinence.

**Do not perform** multi-channel filling and voiding cystometry in the small group of women where pure SUI is diagnosed based on a detailed clinical history and examination.

Inform any woman wishing to consider surgical treatment for UI about:

- the benefits and risks of surgical and non-surgical options
- their provisional treatment plan.

Include consideration of the woman's child-bearing wishes in the counselling.

Offer invasive therapy for OAB and/or SUI symptoms only after an MDT review.

When recommending optimal management the MDT should take into account:

- the woman's preference
- past management
- comorbidities
- treatment options (including further conservative management such as OAB drug therapy).

Inform the woman of the outcome of the MDT review if it alters the provisional treatment plan.
3 Offering surgery

If conservative management for SUI has failed, offer:

- synthetic mid-urethral tape or
- open colposuspension or
- autologous rectus fascial sling.

When offering a surgical procedure discuss with the woman the risks and benefits of the different treatment options for SUI using the information in information to facilitate discussion of risks and benefits of treatments for women with stress urinary incontinence.

Refer women to an alternative surgeon if their chosen procedure is not available from the consulting surgeon.

Offer a follow-up appointment (including vaginal examination to exclude erosion) within 6 months to all women who have had continence surgery.

See what NICE says on preoperative tests.

4 Synthetic tapes

When offering a synthetic mid-urethral tape procedure, surgeons should:

- use procedures and devices for which there is current high quality evidence of efficacy and safety\(^1\)
- only use a device that they have been trained to use (see surgical standards)
- use a device manufactured from type 1 macroporous polypropylene tape
- consider using a tape coloured for high visibility, for ease of insertion and revision.

If women are offered a procedure involving the transobturator approach, make them aware of the lack of long-term outcome data.

Use 'top-down' retropubic tape approach only as part of a clinical trial.

\(^1\) The guideline only recommends the use of tapes with proven efficacy based on robust RCT evidence. However, technological advances are frequent, therefore the choice of tape should include devices that are shown in future clinical trials to have equal or improved efficacy at equal or lower cost. At the time of publication (September 2013) the following met the Guideline Development Group criteria: TVT or Advantage for a 'bottom-up' retropubic approach; TVT-O for an 'inside-out' transobturator approach; Monarc and obtrox halo for an 'outside-in' transobturator approach.
5 **Colposuspension**

**Do not offer** laparoscopic colposuspension as a routine procedure for the treatment of SUI in women. Only an experienced laparoscopic surgeon working in an MDT with expertise in the assessment and treatment of UI should perform the procedure.

6 **Suspension and sling procedures**

**Do not offer** anterior colporrhaphy, needle suspensions, paravaginal defect repair and the Marshall–Marchetti–Krantz procedure for the treatment of SUI.

**Interventional procedures**

NICE has published guidance on insertion of biological slings for stress urinary incontinence with **normal arrangements** for consent, audit and clinical governance.

NICE has published guidance on the following with **special arrangements** for clinical governance, consent, and audit or research:

- single-incision short sling mesh insertion for stress urinary incontinence in women
- bone-anchored cystourethropexy.

7 **Intramural bulking and extraurethral compression**

Consider intramural bulking agents (silicone, carbon-coated zirconium beads or hyaluronic acid/dextran copolymer) for the management of SUI if conservative management has failed. Women should be made aware that:

- repeat injections may be needed to achieve efficacy
- efficacy diminishes with time
- efficacy is inferior to that of synthetic tapes or autologous rectus fascial slings.

**Do not offer** autologous fat and polytetrafluoroethylene used as intramural bulking agents for the treatment of SUI.
Interventional procedures

NICE has published guidance on intramural urethral bulking procedures for stress urinary incontinence with normal arrangements for clinical governance and for audit or research.

NICE has published guidance on extraurethral (non-circumferential) retropubic adjustable compression devices for stress urinary incontinence in women with special arrangements for clinical governance, consent and audit or research.

8 If surgery has failed

Women whose primary surgical procedure for SUI has failed (including women whose symptoms have returned) should be:

- referred to tertiary care for assessment (such as repeat urodynamic testing including additional tests such as imaging and urethral function studies) and discussion of treatment options by the MDT, or
- offered advice as described in initial treatment and advice if the woman does not want continued invasive SUI procedures.

In view of the associated morbidity, the use of an artificial urinary sphincter should be considered for the management of SUI in women only if previous surgery has failed. Life-long follow-up is recommended.
Glossary

BAUS-SFRU
British Association of Urological Surgeons Section of Female and Reconstructive Urology

BSUG
British Society of Urogynaecology

frail older women

those with multiple comorbidities, functional impairments such as walking or dressing difficulties and any degree of cognitive impairment

GMC’s

General Medical Council’s

HRT

hormone replacement therapy

MDT

multidisciplinary team

OAB

overactive bladder

SUI

stress urinary incontinence

TENS

transcutaneous electrical nerve stimulation
UI

urinary incontinence

UTI

urinary tract infection

Sources

Urinary incontinence in women: management (2013 updated 2015) NICE guideline CG171

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.
**Technology appraisals**

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

**Medical technologies guidance, diagnostics guidance and interventional procedures guidance**

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.
Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.