Urinary incontinence: the management of urinary incontinence in women

NICE guideline

Draft for consultation, May 2006

If you wish to comment on this version of the guideline, please be aware that all the supporting information and evidence is contained in the full version.

Contents

Introduction

Urinary incontinence (UI) is a common symptom that may affect women of all ages, with a wide range of severity and nature. While rarely life-threatening incontinence may seriously influence the physical, psychological and social wellbeing of affected individuals. The impact on the families and carers of sufferers may be profound, and the resource implications for the health service considerable.

UI is defined as the complaint of any involuntary urinary leakage. This may occur as a result of a number of abnormalities of function of the lower urinary tract, or as a result of other illnesses, and these tend to cause leakage in different situations. These are defined as follows.

- Stress urinary incontinence is the complaint of involuntary leakage on effort or exertion or on sneezing or coughing.
- Urge urinary incontinence is involuntary urinary leakage accompanied by or immediately preceded by a sensation of an urgent need to urinate.
- Mixed urinary incontinence is associated with urgency and also with exertion, effort, sneezing or coughing.

Other types of UI may be described by the situations that provoke urine loss, for example during sexual intercourse, or on laughing or giggling; continuous urinary incontinence is self explanatory.

The overactive bladder (OAB) is defined as the complaint of urgency and frequency; this is divided into OAB wet, where UI is present, and OAB dry where UI is absent.

Woman-centred care

This guideline offers best practice advice on the care of women with urinary incontinence.

Treatment and care should take into account women's individual needs and preferences. Women with urinary incontinence should have the opportunity to make informed decisions about their care and treatment. Where women do not have the capacity to make decisions, healthcare professionals should follow the Department of Health guidelines – 'Reference guide to consent for examination or treatment' (2001) (available from www.dh.gov.uk).

Good communication between healthcare professionals and women is essential. It should be supported by the provision of evidence-based information offered in a form that is tailored to the needs of the individual woman. The treatment, care and information provided should be culturally appropriate and in a form that is accessible to women who have additional needs, such as women with physical, cognitive or sensory disabilities, and women who do not speak or read English.

Unless specifically excluded by the woman, carers and relatives should have the opportunity to be involved in decisions about the woman's care and treatment.

Carers and relatives should also be provided with the information and support they need.

Key priorities for implementation

The following recommendations have been identified as priorities for implementation.

Assessment and investigation

- At initial clinical assessment women should be categorised into those with stress, urge or mixed UI. Initial treatment should be commenced on this basis.

- Bladder diaries should be used in the initial assessment of women with UI or OAB. Women should be encouraged to complete a minimum of three days of the diary covering both working and leisure days.

- The use of multi-channel cystometry, ambulatory urodynamics or videourodynamics is not recommended prior to non-invasive treatments or primary surgery for stress UI.

Conservative management

- A trial of supervised pelvic floor muscle training of at least 3 months' duration should be offered to women with stress or mixed UI as first-line treatment.

- Supervised bladder training should be offered as first-line treatment to women with urge or mixed UI.

- Treatment with non-proprietary oxybutynin should be offered as first-line antimuscarinic drug treatment to women with OAB or mixed UI. If oxybutynin is not well tolerated, solifenacin, tolterodine, or trospium may be considered as alternatives. Women should be counselled regarding the side effects of antimuscarinic drugs.

- Pelvic floor muscle training should be offered to women in their first pregnancy as a preventive strategy for UI.

Surgical management

- Sacral nerve stimulation is recommended in the treatment of UI due to detrusor overactivity, in women who have not responded to conservative treatments such as lifestyle modifications, behavioural techniques and drug therapy. Women should be selected on the basis of their response to preliminary peripheral nerve evaluation.

- Retropubic mid-urethral tape procedures using a 'bottom-up' approach with macroporous (type 1) polypropylene meshes (such as tension-free vaginal tape) are recommended as treatment options for stress UI where conservative management has failed. Open colposuspension and autologous rectus fascial sling are the recommended alternatives when clinically appropriate.

Competence of surgeons performing operative procedures for urinary incontinence in women

- Surgery for UI should only be undertaken by surgeons who have received appropriate training in the management of UI and prolapse, and who regularly carry out surgery for incontinence in women.

The following guidance is evidence based. The evidence on which the guidance is based is summarised in the full guideline (see section 5).

1 Guidance

1.1 Assessment and investigation

1.1.1 History-taking and physical examination

1.1.1.1 At initial clinical assessment women should be categorised into those with stress, urge or mixed UI. Initial treatment should be commenced on this basis.

1.1.1.2 The clinical assessment should seek to identify relevant predisposing and precipitating factors and other diagnoses which may require referral for additional investigation and treatment.

1.1.2 Pelvic floor assessment

1.1.2.1 Routine digital assessment of pelvic floor muscle contraction is not required in the assessment of women with UI, but should be considered for those who do not initially benefit from pelvic floor muscle training.

1.1.3 Assessment of prolapse

1.1.3.1 Women with UI who have symptomatic prolapse which is visible at or below the vaginal introitus should be referred to a specialist.

1.1.4 Urine testing

1.1.4.1 A urine dipstick test should be undertaken in all women presenting with UI to detect any blood, glucose, protein, leucocytes and nitrites.

1.1.4.2 Women who do not have symptoms and whose urine is negative for leucocytes and nitrites are most unlikely to have UTI and do not require urine culture.

1.1.4.3 Women who do not have symptoms but whose urine tests positively for leucocytes and nitrites should not be commenced on antibiotics without the results of midstream urine culture.

1.1.4.4 Mid-stream urine specimen should be sent for culture in women with symptoms of urinary tract infection who have a negative test for leucocytes or nitrites.

1.1.5 Assessment of residual urine

1.1.5.1 The measurement of post-void residual volume by bladder scan or catheterisation should be performed in women with symptoms of voiding dysfunction or recurrent urinary tract infection.

1.1.5.2 Where assessment of post-void residual urine is required bladder scan is preferred on the grounds of acceptability and adverse events.

1.1.5.3 The finding of a palpable bladder on bimanual or abdominal examination after voiding requires referral to a specialist.

1.1.6 Referral

1.1.6.1 Indications for urgent referral are:

- microscopic haematuria in women aged over 50 years
- visible haematuria
- recurrent or persisting UTI associated with haematuria in women aged 40 years or over
- suspected malignant pelvic mass.

1.1.6.2 Further indications for consideration for referral in women with UI are:

- persisting bladder or urethral pain
- clinically benign pelvic masses
- associated faecal incontinence
- suspected neurological disease
- symptoms of voiding difficulty
- suspected urogenital fistulae
- previous continence surgery
- previous pelvic cancer surgery
- previous pelvic radiation therapy.

1.1.7 Symptom scoring and quality of life assessment

1.1.7.1 The following incontinence-specific quality of life scales are recommended when therapies are being evaluated: ICIQ, BFLUTS, I-QOL, SUIQQ, UISS, SEAPI-QMM, ISI and KHQ.

1.1.8 Bladder diaries

1.1.8.1 Bladder diaries should be used in the initial assessment of women with UI or OAB. Women should be encouraged to complete a minimum of 3 days of the diary covering both working and leisure days.

1.1.9 Pad testing

1.1.9.1 Pad tests are not recommended in the routine assessment of women with UI.

1.1.10 Urodynamic testing

1.1.10.1 The use of multi-channel cystometry, ambulatory urodynamics or videourodynamics is not recommended prior to non-invasive treatments or primary surgery for stress UI.

1.1.10.2 Multi-channel filling and voiding cystometry is recommended prior to secondary surgery for stress UI or any surgery for OAB.

Ambulatory urodynamics or videourodynamics may also be considered in these circumstances.

1.1.11 Other tests of urethral competence

1.1.11.1 Q-tip, Bonney's, Marshall's, and the Fluid-Bridge tests are not recommended in the assessment of women with UI.

1.1.12 Endoscopy

1.1.12.1 Cystoscopy is not recommended in the assessment of women with UI alone.

1.1.13 Imaging

1.1.13.1 Imaging (MRI, CT, X-ray, ultrasound) is not recommended for the routine assessment of women with UI.

1.2 Conservative management

1.2.1 Lifestyle interventions

1.2.1.1 A period of caffeine reduction is recommended alongside bladder training in women with OAB.

1.2.1.2 Modification of high or low fluid intake should be considered in women with UI or OAB.

1.2.1.3 Weight loss is recommended for obese women (those with body mass index greater than 30) who have UI or OAB.

1.2.1.4 Women with UI or OAB who smoke should be advised to stop.

1.2.2 Physical therapies

1.2.2.1 A trial of supervised pelvic floor muscle training of at least 3 months duration should be offered to women with stress or mixed UI as first-line treatment.

1.2.2.2 Where pelvic floor muscle training is beneficial exercises should be continued.

1.2.2.3 Pelvic floor muscle training programmes should comprise at least eight contractions performed three times per day.

1.2.2.4 The use of perineometry or pelvic floor electromyography as biofeedback should not be used as a routine part of pelvic floor muscle training.

1.2.2.5 Electrical stimulation should not routinely be used in combination with pelvic floor muscle training.

1.2.2.6 Electrical stimulation and/or biofeedback may be considered to initiate and educate pelvic floor muscle contraction in those women who cannot actively contract their pelvic floor muscles to aid compliance and motivation.

1.2.3 Behavioural therapies

1.2.3.1 Supervised bladder training should be offered as first-line treatment to women with urge or mixed UI.

1.2.3.2 Where women achieve partial benefit from bladder training programmes, the combination of an antimuscarinic agent with bladder training may be considered where frequency is a bothersome symptom.

1.2.3.3 Prompted and timed voiding toileting programmes are recommended as strategies for reducing leakage episodes in cognitively impaired women.

1.2.4 Drug therapies

1.2.4.1 If nocturia is a bothersome symptom in women with UI or OAB, desmopressin may be used specifically to reduce this. The use of desmopressin for nocturia in women with non-neurogenic UI is outside the UK marketing authorisation for the product. Informed consent to treatment should be obtained and documented.

1.2.4.2 Duloxetine is not recommended as a first-line treatment for women with predominant stress UI. Women should be counselled regarding the side effects of duloxetine.

1.2.4.3 Intravaginal oestrogen preparations and systemic hormone replacement therapy are not recommended for the treatment of UI.

1.2.4.4 Treatment with non-proprietary oxybutynin should be offered as first-line antimuscarinic drug treatment to women with OAB or mixed UI. If oxybutynin is not well tolerated, solifenacin, tolterodine, or trospium may be considered as alternatives. Women should be counselled regarding the side effects of antimuscarinic drugs.

1.2.4.5 Flavoxate, propantheline and imipramine should not be used for the treatment of UI or OAB in women. Propiverine may be used to treat frequency in women with OAB, but cannot be recommended for the treatment of UI.

1.2.5 Non-therapeutic interventions

1.2.5.1 Bladder catheterisation (intermittent or indwelling urethral or suprapubic) may be indicated for any woman in whom persistent urinary retention is causing overflow incontinence, symptomatic infections, or renal dysfunction, and in whom this cannot otherwise be corrected. Clinicians should be aware that the use of indwelling catheters in women with OAB may not result in continence.

1.2.5.2 Intermittent urethral catheterisation should be used for women with urinary retention who can be taught to self-catheterise or who have a caregiver who can perform the technique.

1.2.5.3 Careful consideration should be given regarding the impact of long-term indwelling urethral catheterisation. The benefits and risks should be discussed with the patient/carer. Indications for the use of long-term indwelling urethral catheters for women with UI include those:

- with chronic retention who are unable to manage intermittent self-catheterisation
- with skin wounds, pressure sores, or irritations that are being contaminated by urine
- for whom bed and clothing changes are distressing or disruptive.

1.2.5.4 Indwelling suprapubic catheters are an alternative to long-term urethral catheters and may be associated with a lower rate of symptomatic urinary tract infection, 'by-passing' and urethral complications of indwelling urethral catheters.

1.2.5.5 Absorbent products should not be considered as a treatment for UI. They should be considered as:

- a coping strategy pending definitive treatment
- an adjunct to other ongoing therapy
- long-term management of UI only after treatment options have been explored.

1.2.5.6 Intravaginal and intra-urethral devices are not recommended for the routine management of UI in women. They may be considered by women for occasional use when necessary to prevent UI, for example during physical exercise.

1.2.6 Alternative therapies

1.2.6.1 Alternative therapies are not routinely recommended for the treatment of UI or OAB. Where women wish to pursue alternative therapies, they should consider areas for which there is at least some supportive evidence (acupuncture or hypnosis).

1.2.7 Preventive use of conservative therapies

1.2.7.1 Pelvic floor muscle training should be offered to women in their first pregnancy as a preventive strategy for UI.

1.3 Surgical management

1.3.1 Procedures for overactive bladder

1.3.1.1 Sacral nerve stimulation is recommended in the treatment of UI due to detrusor overactivity, in women who have not responded to conservative treatments such as lifestyle modifications, behavioural techniques and drug therapy. Women should be selected on the basis of their response to preliminary peripheral nerve evaluation.

1.3.1.2 Augmentation cystoplasty for the management of idiopathic detrusor overactivity should be restricted to women who have not responded to conservative treatments such as lifestyle modifications, behavioural techniques, and drug therapy, and who are willing and able to self-catheterise. Preoperative counselling should focus on common complications: bowel disturbance, metabolic acidosis, mucus, urinary tract infection and urinary retention.

1.3.1.3 Urinary diversion should only be considered in women with OAB in whom all conservative treatments have failed and where sacral nerve stimulation and augmentation cystoplasty are not appropriate or unacceptable.

1.3.1.4 Botulinum toxin A should only be used in women with idiopathic detrusor overactivity in the research environment or when women have not responded to conservative treatments such as lifestyle modifications, behavioural techniques and drug therapy. Women should be informed about the lack of long-term data, and that the use of botulinum toxin A for this indication is outside the UK marketing authorisation for the product. Informed consent to treatment should be obtained and documented.

1.3.1.5 Botulinum toxin B is not recommended for the treatment of women with idiopathic OAB.

1.3.2 Surgery for stress urinary incontinence

1.3.2.1 Women with stress UI should only be considered for surgery subject to careful counselling about the benefits and risks of each procedure.

1.3.2.2 Retropubic mid-urethral tape procedures using a 'bottom-up' approach with macroporous (type 1) polypropylene meshes (such as tension-free vaginal tape) are recommended as treatment options for stress UI where conservative management has failed. Open colposuspension and autologous rectus fascial sling are the recommended alternatives when clinically appropriate.

1.3.2.3 Slings using a retropubic 'top-down' or a transobturator foramen approach or employing materials other than a wholly macroporous design are only recommended as treatment options for stress UI if there are special arrangements for consent and for audit or research.

1.3.2.4 Slings using materials other than macroporous (type 1) construction (made of polyester, polytetrafluoroethylene or silicone) are not recommended for the treatment of stress UI.

1.3.2.5 Intramural bulking agents (glutaraldehyde cross-linked collagen, silicone, carbon-coated zirconium beads, hyaluronic acid/dextran co-polymer) may be considered for the management of stress UI where conservative management has failed. Women should be aware that:

- repeat injections may be required to achieve efficacy
- efficacy diminishes with time
- efficacy is inferior to retropubic suspension or sling.

1.3.2.6 In view of the associated morbidity, the use of an artificial urinary sphincter should only be considered for the management of women with stress UI when other surgical options have been exhausted.

1.3.2.7 Laparoscopic colposuspension is not recommended as a routine procedure.

1.3.2.8 Anterior colporrhaphy, needle suspensions, paravaginal defect repair, and the Marshall Marchetti Krantz procedure are not recommended as treatments for stress UI.

1.3.2.9 Autologous fat and polytetrafluoroethylene used as intramural bulking agents are not recommended for the treatment of stress UI.

1.4 Competence of surgeons performing operative procedures for urinary incontinence in women

1.4.1 Surgery for UI should only be undertaken by surgeons who have received appropriate training in the management of UI and prolapse, and who regularly carry out surgery for incontinence in women.

1.4.2 Training should be sufficient to develop the knowledge and generic skills documented below.

1.4.2.1 Knowledge

- Specific indications for surgery.
- Required preparation for surgery including preoperative investigations.
- Outcomes and complications of proposed procedure.
- Anatomy relevant to procedure.
- Steps involved in procedure.
- Knowledge of alternative management options.
- Likely postoperative progress.

1.4.2.2 Other generic skills

- Be able to explain procedures and possible outcomes to patients and family and take informed consent.

- Possess the necessary hand–eye dexterity to complete the procedure safely and efficiently, demonstrating appropriate use of assistance.
- Communicate effectively with and manage the operative team.
- Be able to prioritise interventions.

1.4.2.3 Attitude

- Recognise when to ask for advice from others.
- Demonstrate commitment to multidisciplinary team working with other healthcare professionals involved in the care of women with UI.

1.4.3 Training should include competence in cystourethroscopy.

1.4.4 Operative competence of surgeons undertaking surgical procedures to treat UI or OAB in women should be formally assessed by trainers through a structured process.

1.4.5 Existing surgeons should be able to demonstrate that their training, experience and current practice equates to the standards laid out for newly trained surgeons.

1.4.6 Surgery for UI or OAB should only be undertaken by surgeons who carry out sufficient case load to maintain their skills. An annual workload of 20 cases per year per primary procedure is recommended. Surgeons undertaking fewer than five cases of any procedure annually should only do so with the support of their clinical governance committee, otherwise referral pathways should be in place within clinical networks.

1.4.7 There should be a nominated clinical lead within each surgical unit with responsibility for continence and prolapse surgery. They should work within the context of an integrated continence service.

1.4.8 A national audit of continence surgery should be undertaken.

1.4.9 Surgeons undertaking continence surgery should maintain careful audit data and submit their outcomes to National Registries such as those held by the British Society of Urogynaecology (BSUG) and British Association of Urological Surgeons Section of Female and Reconstructive Urology (BAUS-SFRU).

2 Notes on the scope of the guidance

All NICE guidelines are developed in accordance with a scope document that defines what the guideline will and will not cover. The scope of this guideline was established, after a period of consultation, at the start of the guideline development process; it is available from www.nice.org.uk/page.aspx?o=240828.

This clinical guideline concerns the management of UI in adult women. It includes:

- stress UI
- OAB syndrome (with or without urge UI)
- mixed UI.

It has been developed with the aim of providing guidance on:

- initial and ongoing assessments and investigations
- appropriate use of conservative and surgical treatment options
- the competence required by surgeons performing the primary and subsequent operative procedures.

Areas outside the remit of the guideline are:

- the management and treatment of co-morbidities, such as pelvic organ prolapse, except where they relate to the treatment of UI and/or OAB syndrome
- incontinence caused by neurological disease
- incontinence in men
- incontinence in children
- anal incontinence.

3 Implementation in the NHS

The Healthcare Commission assesses the performance of NHS organisations in meeting core and developmental standards set by the Department of Health in 'Standards for better health' issued in July 2004. Implementation of clinical guidelines forms part of the developmental standard D2. Core standard C5 says that national agreed guidance should be taken into account when NHS organisations are planning and delivering care.

NICE has developed tools to help organisations implement this guidance (listed below). These are available on our website (www.nice.org.uk/CG0XX). ***[NICE to amend list as needed at time of publication]***

- Slides highlighting key messages for local discussion.
- Costing tools:
  - costing report to estimate the national savings and costs associated with implementation
  - costing template to estimate the local costs and savings involved.
- Implementation advice on how to put the guidance into practice and national initiatives which support this locally.
- Audit criteria to monitor local practice.

4 Research recommendations

The Guideline Development Group has made the following recommendations for research, on the basis of its review of the evidence. The Group regards these recommendations as the most important research areas to improve NICE guidance and patient care in the future. The Guideline Development Group's full set of research recommendations is detailed in the full guideline (see section 5).

4.1 Does carrying out multi-channel cystometry affect the outcome and cost-effectiveness of interventions for UI or OAB?

Why this is important

It has long been held that clinical assessment of patients with UI is unreliable; the widespread availability of invasive urodynamic testing has led to an assumption of improved diagnostic value. Although many currently available treatments for UI and OAB have been evaluated in patients with known urodynamic background, it has never been shown for any treatment that carrying out urodynamics improves outcome. Urodynamic investigation has its own associated cost and morbidity. Many units have significant waiting times for investigation, and hence unnecessary use of investigations has significant resource implications.

4.2 What is the clinical and cost-effectiveness of mid-urethral tape procedures compared with pelvic floor muscle training in the first-line treatment of stress UI?

Why this is important

Although there are no useful comparative data on the effectiveness of pelvic floor muscle training and surgery in the treatment of stress UI, indirect comparison suggests that surgery is associated with higher cure rates but also substantially greater morbidity. Hence pelvic floor muscle training is used as first-line treatment. Information on long-term outcomes from pelvic floor muscle training is limited although it appears that a significant number of women initially successfully treated by pelvic floor muscle training will ultimately undergo surgery. The development of newer minimal access surgical procedures with shorter recovery periods than conventional surgery may make surgery a more acceptable option than previously. The clinical and cost-effectiveness of these procedures in comparison with pelvic floor muscle training has not yet been proven.

4.3 What is the optimum pelvic floor muscle training regimen for women with stress UI?

Why this is important

There is a large body of evidence to support the use of pelvic floor muscle training in the treatment of stress and mixed UI. A range of regimens has been employed with variation in the number and frequency of exercises advocated, the duration of treatment, the method of delivery and the role of adjunctive therapies. Clarity as to the optimum regimen may improve the cost-effectiveness of this treatment.

4.4 What is the effectiveness of modifying lifestyle factors on UI and OAB?

Why this is important

Several studies have shown associations between various lifestyle factors and the prevalence or severity of UI and OAB. There is very limited information on the effect of modifying these factors on urinary symptoms. Such interventions are in general free from adverse effects and cost neutral or cost saving and therefore justify further evaluation.

4.5 What is the effectiveness of physical and behavioural therapies and lifestyle modifications in the prevention of UI in women?

Why this is important

The impact of UI on individual sufferers, their families and carers and on the NHS as a whole is huge. Prevention would have advantages from all perspectives. There is limited information on the use of antenatal pelvic floor muscle training and some lifestyle modifications in the prevention of UI. There are, however, no data on the long-term outcomes of these and other conservative interventions used in a preventive sense. For example, although it has been shown that pelvic floor muscle training used in a first pregnancy

may reduce the prevalence of UI postnatally, it is not known whether this has any influence following second and subsequent pregnancies.

5 Other versions of this guideline

How this guideline was developed

NICE commissioned the National Collaborating Centre for Women's and Children's Health to develop this guideline. The Centre established a Guideline Development Group (see appendix A), which reviewed the evidence and developed the recommendations. An independent Guideline Review Panel oversaw the development of the guideline (see appendix B).

There is more information in the booklet 'The guideline development process: an overview for stakeholders, the public and the NHS' (second edition, published 2006), which is available from www.nice.org.uk/guidelinesprocess or by telephoning 0870 1555 455 (quote reference N***).

5.1 Full guideline

The full guideline, 'Urinary incontinence: the management of urinary incontinence in women', is published by the National Collaborating Centre for Women's and Children's Health; it is available from [website details to be added], the NICE website (www.nice.org.uk/CGXXXfullguideline) and the website of the National Library for Health (www.nlh.nhs.uk). **[Note: these details will apply to the published full guideline.]**

5.2 Quick reference guide

A quick reference guide for healthcare professionals is also available from the NICE website (www.nice.org/CGXXXquickrefguide) or from the NHS Response Line (telephone 0870 1555 455; quote reference number N0XXX). **[Note: these details will apply when the guideline is published.]**

5.3 Understanding NICE guidance: information for patients and carers

A version of this guideline for women with urinary incontinence and their carers, and for the public, is available from the NICE website

(www.nice.org.uk/CGXXXpublicinfo) or from the NHS Response Line (0870 1555 455); quote reference number N0xxx). **[Note: these details will apply when the guideline is published.]**

6 Related NICE guidance

- Infection control: prevention of healthcare-associated infection in primary and community care. *NICE clinical guideline* no. 2 (2003). Available from www.nice.org.uk/CG002
- Referral for suspected cancer. *NICE clinical guideline* no. 27 (2005). Available from www.nice.org.uk/CG027
- Improving outcomes in urological cancer. *NICE cancer service guidance* (2002). Available from www.nice.org.uk/csguc
- Stress incontinence – tension-free vaginal tape. *NICE technology appraisal* no. 56 (2003). Available from www.nice.org.uk/TA056 (this guidance will be withdrawn on publication of the urinary incontinence clinical guideline).
- Sacral nerve stimulation for urge incontinence and urgency-frequency. *NICE interventional procedure guidance* no. 64 (2004). Available from www.nice.org.uk/IPG064
- Intramural urethral bulking procedures for stress urinary incontinence in women. *NICE interventional procedure guidance* no.138 (2005). Available from www.nice.org.uk/IPG138
- Insertion of extraurethral (non-circumferential) retropubic adjustable compression devices for stress urinary incontinence in women. *NICE interventional procedure guidance* no.133 (2005). Available from www.nice.org.uk/IPG133
- Insertion of biological slings for stress urinary incontinence in women. *NICE interventional procedure guidance* no.154 (2006). Available from www.nice.org.uk/IPG154
- Bone-anchored cystourethropexy. *NICE interventional procedure guidance* no.18 (2003). Available from www.nice.org.uk/IPG018

NICE is in the process of developing the following guidance (details available from www.nice.org.uk):

- Postnatal care. NICE clinical guideline. (Publication expected July 2006.)
- Faecal incontinence. NICE clinical guideline. (Publication expected June 2007.)
- Transobturator foramen procedures for stress urinary incontinence. NICE interventional procedure guidance. (Publication date to be confirmed.)

7 Updating the guideline

NICE clinical guidelines are updated as needed so that the results of new research can be put into practice. We check for new evidence 2 and 4 years after publication, to decide whether all or part of the guideline should be updated. If important new evidence is published at other times, we may decide to do a more rapid update of some recommendations. The process of reviewing the evidence is expected to begin 4 years after the date of issue of this guideline. Reviewing may begin before this if significant evidence that affects the guideline recommendations is identified. The updated guideline will be available within 2 years of the start of the review process.

Appendix A: The Guideline Development Group

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Appendix B: The Guideline Review Panel

The Guideline Review Panel is an independent panel that oversees the development of the guideline and takes responsibility for monitoring its quality. The Panel includes experts on guideline methodology, healthcare professionals and people with experience of the issues affecting patients and carers. The members of the Guideline Review Panel were as follows.

[To be added after consultation]

Appendix C: The algorithm

The algorithm is available as a separate file on the website.