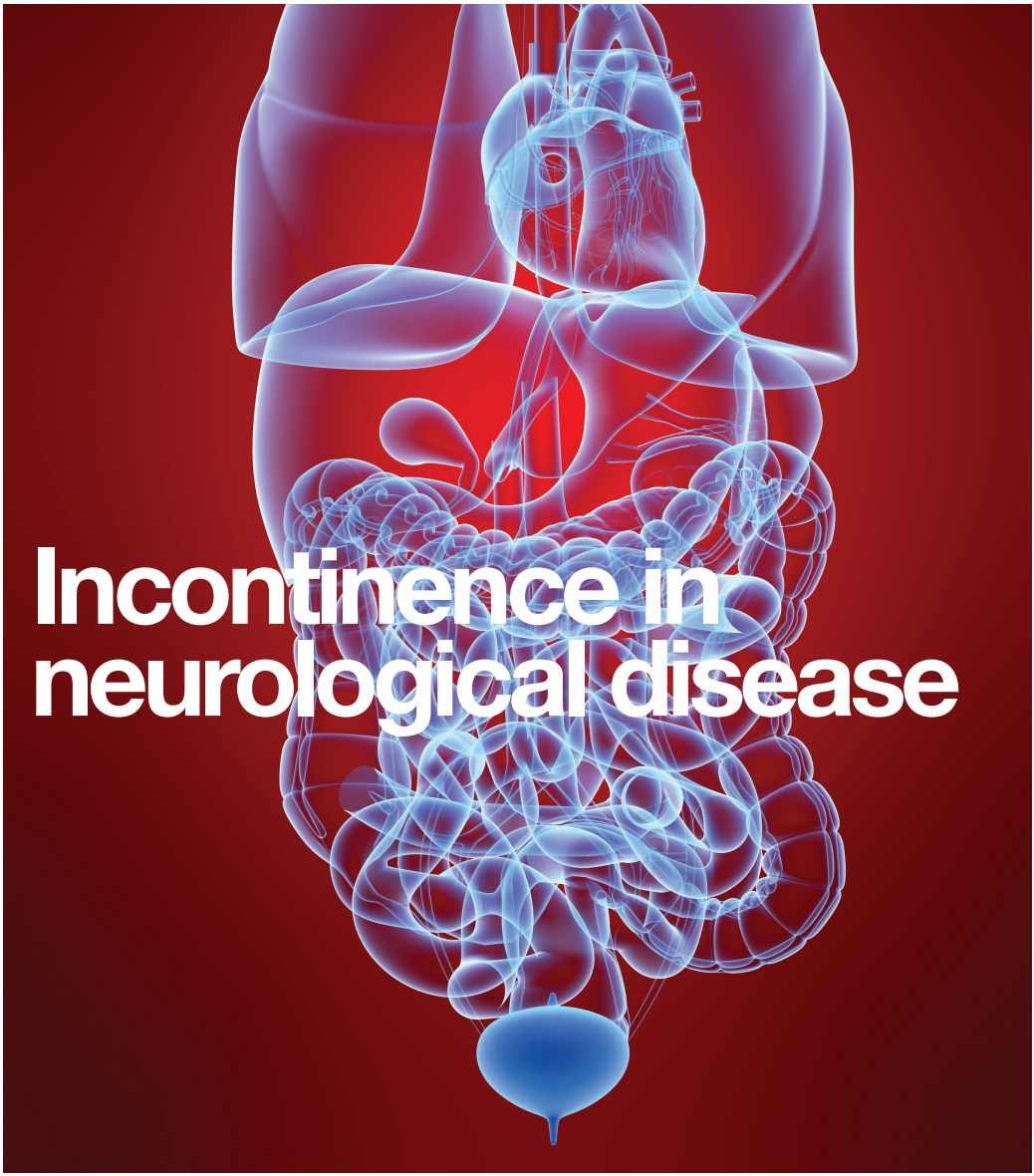
NICE BULLETIN

NHS
National Institute for
Health and Clinical Excellence



Incontinence in neurological disease

Nursing IN PRACTICE

Welcome

A new clinical guideline from the National Institute for Health and Clinical Excellence (NICE) hopes to minimise the distressing effects that lower urinary tract dysfunction can have on people with neurological conditions. Nurses can play a key role in the management of the condition by supporting the assessment process, offering information and support to patients and their families, and advising on treatments and potential complications.

Nursing IN PRACTICE

Background

In August 2012, NICE published its first clinical guideline on the management of lower urinary tract dysfunction in neurological disease.

The function of the lower urinary tract (consisting of the urinary bladder and urethra) is to store and expel urine in a coordinated and controlled manner. This activity is regulated by the central and peripheral nervous systems, and so if there is neurological disease, urinary symptoms can arise.

Neurological disease involves damage to the brain, suprasacral spinal cord, sacral spinal cord or the peripheral nervous system. This can encompass:

- congenital and perinatal conditions (e.g. cerebral palsy)
- acquired, stable conditions (e.g. stroke and head or spinal cord injuries), and
- acquired, degenerative conditions (e.g. multiple sclerosis, Parkinson's disease and dementia)

All of these tend to produce characteristic patterns of bladder, bowel and sexual dysfunction.

Symptoms of neurogenic lower urinary tract dysfunction may relate to impaired urine storage and/or bladder emptying difficulties, such as increased urinary frequency and incontinence. These can have a significant impact on quality of life; for example, causing embarrassment, leading to social isolation and impairing activities of daily living. Furthermore, there is a marked increase in the risk of urinary tract infection and kidney function can be lost as a result of abnormally high pressures within the bladder (both from the effects of urinary tract infection and as a result of kidney stones). These risks and side effects can be even more difficult in neurological disease, when a person may already have mobility, hand function, and sight impairments.

The NICE clinical guideline outlines recommendations for nurses and other healthcare professionals on how and when they should assess patients with neurological disease for incontinence and the treatments they should offer so as to ensure patients receive the best possible care.

ASSESSING URINARY TRACT DYSFUNCTION IN NEUROLOGICAL DISEASE

The NICE clinical guideline advises healthcare professionals to assess for lower urinary tract dysfunction in neurological disease in new patients, those whose symptoms have changed, and those requiring periodic reassessment of their management plan. The interval should be dictated by the patient's particular circumstances (e.g. age, diagnosis and type of management), however NICE advises that these should never exceed three years.

NICE advises that the assessment should involve a number of components, such as clinical-history taking, a urine dipstick test and examinations of the patient's external genitalia, abdomen and blood pressure. These will typically be performed by a medical professional, such as a general practitioner or an urologist. For further information about these recommendations, please read Section 1.1 of the guideline.

If the initial assessment in new patients shows that the incontinence does not have a neurological cause, NICE advises healthcare professionals to refer to its previously published guidelines:

- Urinary incontinence in women (2006) – www.nice.org.uk/CG40
- Lower urinary tract symptoms in men (2010) – www.nice.org.uk/CG97

OFFERING INFORMATION AND SUPPORT TO PATIENTS AND THEIR FAMILIES

Many patients will have to cope with the side effects of medication, the social and psychological consequences of using intermittent self-catheterisation, the impact of indwelling catheterisation and the continuing use of pads or appliances. These side effects can also have an impact on the quality of life of the patient's family members and carers, and there may be issues with the physical demands of caring for a person with neurological disease and urinary problems, as well as psychological, relationship and social pressures.

With this in mind, the NICE guideline advises that specific information and training should be offered to patients with neurogenic urinary tract dysfunction, their family members and carers. This should be tailored to the patient's physical condition and cognitive function in order to promote their active participation in their care and self-management. Both patients and their families or carers should be informed of how to access further support and information.

If patients are starting to use, or are using catheters, appliances and pads, they should be trained and supported by healthcare professionals with training in the relevant bladder management system and who are knowledgeable about the range of products available. These products should meet their needs and be reviewed every two or more years.

Advice on how to improve the general experience of adult patients in the NHS has been outlined in NICE's clinical guideline 138; for further information about how nurses and other healthcare professionals should enable patients to be actively involved in their care, please read Section 1.5 of CG 138.

ACCESSING AND INTERACTING SERVICES

Care for patients with neurogenic lower urinary tract dysfunction can involve many different healthcare professionals and settings; it is important that these are aligned. NICE advises that patients should be given written information that includes:

- A list of key healthcare professionals involved in their care, as well as a description of their roles and contact details
- Copies of all clinical correspondence
- A list of prescribed medications and equipment.

This information should be sent to the person's GP.

Furthermore, if a patient has received care in a specialised setting (e.g. in a spinal injury unit or a paediatric oncology unit), NICE advises that the contact details of this setting should be given to the patient/carer and to the non-specialist nursing and medical staff involved in their routine care.

TREATING INCONTINENCE IN NEUROLOGICAL DISEASE

The NICE clinical guideline outlines a number of treatments that healthcare professionals should consider in the management of incontinence in neurological disease. These include behavioural treatments (e.g. timed voiding, bladder retraining and habit retraining), bladder wall injections of botulinum toxin type A[1] and augmentation cystoplasty for treating problems with bladder storage, to pelvic floor muscle training, autologous fascial sling surgery and artificial urinary sphincter for treating stress incontinence.

These are not detailed in this bulletin; nurses should consult Sections 1.3 to 1.8 of the NICE clinical guideline for the specific details, requirements and considerations.

INFORMING AND MANAGING POTENTIAL COMPLICATIONS

There are a number of complications that can arise from neurogenic lower urinary tract dysfunction and how it is managed. These have been broadly summarised below.

RENAL IMPAIRMENT

Patients should be aware of the increased risk of renal complications which can arise in neurogenic urinary tract dysfunction. These can include kidney stones, hydronephrosis and scarring, particularly in those who have spina bifida or spinal cord injury. Patients should be informed of the symptoms they should look out for, such as loin pain, urinary tract infection and haematuria and when to see their healthcare professional.

Furthermore, when discussing treatment options, nurses should inform patients that indwelling catheters may be associated with higher risks of renal complications than other forms of bladder management (e.g. intermittent self catheterisation). Renal imaging should be used to investigate symptoms that could suggest upper urinary tract disease.

BLADDER STONES

There is an increased risk of bladder stones in people with neurogenic lower urinary tract dysfunction. Patients should be informed of the symptoms to look out for, such as recurrent infection, recurrent catheter blockages or haematuria.

Furthermore, nurses should discuss with the patient and/or their family members and carers that indwelling catheters (urethral and suprapubic) are associated with a higher incidence of bladder stones compared with other forms of bladder management. They should be advised on the symptoms to look out for, e.g. recurrent infection, recurrent catheter blockages or haematuria and that they should see their healthcare professional if these occur. Patients with symptoms that suggest the presence of bladder stones (for example, recurrent

[1] At the time of publication (August 2012), botulinum toxin type A did not have UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the GMC's Good practice in prescribing medicines – guidance for doctors for further information.

catheter blockages, recurrent urinary tract infection or haematuria) should be referred for cystoscopy.

BLADDER CANCER

Patients should be advised that there may be an increased risk of bladder cancer in neurogenic lower urinary tract dysfunction, in particular for those who have a long history of the condition and complicating factors, such as recurrent urinary tract infections. Symptoms to look out for (especially haematuria) will mean they should see their healthcare professional.

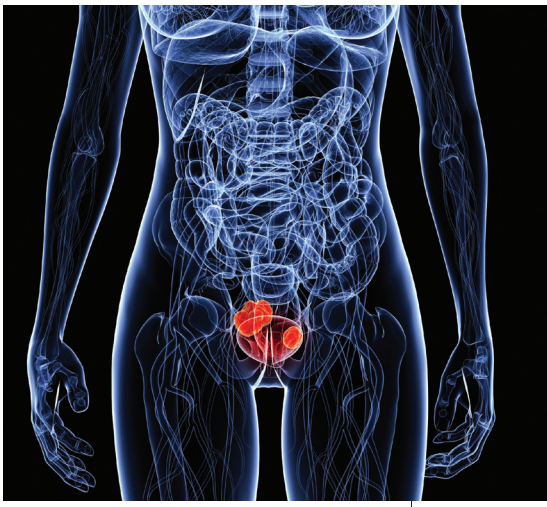
Healthcare professionals should arrange urgent (i.e. within 2 weeks) investigation with urinary tract imaging and cystoscopy for patients with:

- visible haematuria or
- increased frequency of urinary tract infections or
- other unexplained lower urinary tract symptoms

SUPPORT TOOLS AND PATIENT INFORMATION

NICE has published a range of support tools to help healthcare professionals use the clinical guideline, such as:

- Baseline assessment tool: this resource can be used to identify if an organisa tion's practice is in line with in NICE's recommendations and if not, how they can change this.
- Costing report: this resource estimates the financial impact to the NHS of implementing the clinical guideline in England, focusing on those recommen dations that will either require the most resources to implement or will generate the most savings.



In addition to these, NICE has published advice that nurses can give to their patients who have neurogenic lower urinary tract dysfunction (or their families or carers), which outlines the care that they should expect to receive from the NHS, and questions they may wish to ask their healthcare professionals. For further information, download the "patient version" at www.nice.org.uk/CG148.

CONCLUSION

The NICE clinical guideline offers practical, evidence-based advice for nurses and other healthcare professionals on how to assess and care for patients with neurogenic lower urinary tract dysfunction.

To access the full recommendations, support tools and patient information, please visit: www.nice.org.uk/CG148.