GUIDELINES ON CATHETER USE IN PATIENTS WITH A HIP FRACTURE

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This article describes the development of catheter guidelines on an orthopaedic trauma unit. The guidelines were developed to promote best practice for patients admitted to hospital with a hip fracture and to standardise their care. This is a summary: the full paper and reference list can be accessed at nursingtimes.net.

The focus of continence care should be assessment and treatment rather than containment; a health professional who asks the trigger question: ‘Do you have problems with your bladder or bowels?’ should be able to manage any problem or refer the patient for specialist advice.

In conjunction with the assessment, a care-plan algorithm can help health professionals to achieve optimal care. Algorithms can pull together all the elements of care and treatment for a particular condition, giving evidence-based directions of care with the aim of achieving an agreed outcome.

PROJECT DEVELOPMENT

The main aim of this project was to ensure that patients admitted with a hip fracture had their continence needs assessed and received the most appropriate treatment.

The orthopaedic unit at Newcastle General Hospital comprises two acute wards and a rehabilitation ward. The unit adopts a multidisciplinary approach to care delivery, which is based largely upon those recommendations specified in the SIGN guidelines (SIGN, 2002). These are considered to be the ‘gold standard’ of hip fracture management. The unit has also devised and implemented guidelines for proximal femoral fractures that describe the optimal patient care if both successful surgery and early discharge are to be achieved, and complications prevented.

Nurse practitioners have a remit to improve services for older patients admitted to the unit during the pre-operative phase, up to 48 hours post-operatively, and during rehabilitation. They work closely with other nurse specialists to provide care based on best-practice guidelines and address the complex needs associated with this client group.

There was a concern that many urethral catheters remained in place for longer than necessary following hip surgery, leading to the potential problem of urinary tract infection (UTI) or problems with urinary frequency and urgency. Local anecdotal evidence suggested that practice related to the use of urinary catheters could be improved. One particular problem was that patients were often catheterised before a bladder ultrasound was carried out to detect pre-existing urethral retention. Staff did not always consider using intermittent catheterisation and the indications for using a urethral catheter were not always clear. Anaesthetic consultants had also raised concerns that patients were incontinent peri-operatively, which had implications for both surgical intervention and wound management.

AUDIT OF CURRENT PRACTICE

There are no local or national guidelines advising when to catheterise or when to commence intermittent self-catheterisation if a residual urine volume is present in patients who have a fractured neck of femur. In general, catheterisation should be avoided except in the following specific circumstances:

- In the presence of urinary incontinence when skin integrity becomes a risk;
- On a long journey, for example when transporting patients;
- Where there is concern about urinary retention;
- When monitoring renal/cardiac function (SIGN, 2002).

In patients who do have a urethral catheter, good catheter care and management are vital to minimise the risk of complications. The use of an indwelling urinary catheter raises the risk of infection and is the main factor that predisposes patients to a UTI (Godfrey and Evans, 2000). UTIs are associated with pyrexia; bypassing of the catheter; and foul,

IMPLICATIONS FOR PRACTICE

- Urinary catheters are associated with increased risk of urinary tract infection and other urinary complications. They should not be inserted without a full continence assessment to ensure they are necessary.

- Where urinary catheters are required, excellent catheter care is vital to reduce the risk of complications.

- Urinary catheters should be removed as soon as is clinically appropriate.

- Health professionals must achieve the best possible outcomes for every patient interaction. Adopting strategies such as evidence-based care pathways to aid practice is likely to enhance patient concordance with treatment and, most importantly, to enhance the outcomes achieved by that treatment.
offensive urine and can cause acutely confused states in older people. As well as the risk of UTIs, prolonged catheterisation increases the risk of urethral stricture formation, which may cause outflow obstruction and adversely affect continence when the catheter is removed.

Despite the disadvantages of urethral catheterisation, an indwelling urinary catheter is used commonly in the initial acute period of care for patients admitted with a fractured neck of femur. Catheterisation may be required to monitor urinary output or to manage urinary incontinence when regular movement for hygiene purposes can exacerbate pain and discomfort.

The project was aimed at all qualified nursing staff, who were invited to complete an anonymous questionnaire. This involved the staff on all wards within the unit. The audit focused on the knowledge base of staff – more specifically relating to the choice of catheter and indications for use – as well as on assessing their level of skill and ascertaining any training needs.

**PROJECT OUTCOME**

It was acknowledged that there were limitations associated with the questionnaire in terms of the responses that staff would be willing to share. Additionally, the questions were very broad and not scientifically based, which could perhaps lead to some degree of ambiguity.

The questionnaire asked if the participants felt competent in their ability to choose the correct type and size of catheter, and 90% of the staff who responded felt that they were competent. However, responses to questions about long-term and short-term use showed that fewer than 20% of staff could name the correct type of catheter for their patients’ needs.

The questionnaire also asked in which circumstances nurses would consider catheterising a patient. The general responses were the three indications recommended by SIGN (2002): retention of urine; monitoring of urine; and in the presence of incontinence where tissue damage is a risk. However, the staff usually only gave one of those reasons, not all three.

The unit has its own bladder scanner and participants were asked if they felt competent in using it. Some 90% responded that they did, as well as highlighting that they would always use the scanner before catheterising a patient when retention is suspected. However, there was no guideline in place to recommend what to do if the patient was not managing to empty their bladder but had a low bladder volume.

The questionnaire was successful in establishing current trends and practices among the trauma nurses and gave insight into potential training needs. Recommendations included:

- Offering further training about the indications for catheter use, catheter selection and sizes and clarifying the reasons for this choice;

**REFERENCES**


- Developing local guidelines based on best practice in relation to hip fractures and continence care.

**GUIDELINES FOR BEST PRACTICE**

A multidisciplinary group of practitioners from the hospital with an interest in continence care developed two independent guidelines, one for the management of patients with urinary retention and one related to the use of urethral catheters for patients undergoing orthopaedic surgery. The guidelines have been formulated so they can be used within other specialised areas or in clinical areas that have received patients outside their own specialty.

These guidelines are concerned with providing advice and guidance to all staff who are treating patients with a fractured neck of femur with urinary retention problems and offering general information relating to urethral catheterisation before hip surgery.

**CONCLUSION**

The guidelines were launched in December 2004 with the aim of improving catheter care for this client group by standardising care across the trauma unit and incorporating the guidelines into the care pathway for patients with a hip fracture.