



## Effective UTI management: The nurse's role

*Urinary tract infections (UTIs) are still a major concern for patients with neurogenic bladder dysfunction. This article focuses on how nurses can help this group of patients recognise, manage and prevent UTIs.*

### **UTIs are still a major medical concern**

Despite major advancements in treating patients with neurogenic bladder, UTIs are still a major issue. A 2017 US study following spinal cord injury (SCI) patients found that UTIs were the greatest complication in the first year, with patients experiencing more than four UTIs over the course of the year<sup>1</sup>.

Existing data<sup>2</sup> also documents that UTIs are not limited to SCI patients.

### **Education is key**

Healthcare professionals face significant challenges when trying to manage UTIs. "We have to balance trying to control the risk of UTIs developing by managing the risk factors and educating the patient on how to perform ISC, while at the same time, trying to reduce the use of antibiotics in these patients and selecting the right antibiotics, if there is an infection," explains Prof. Pierre Denys.

This balancing act requires drawing on the wide range of individuals involved in patient care in clinical as well as community settings. According to Prof. Denys, more education is needed for both general practitioners and carers.

Also the education of the patients must be consistent and geared towards everyday life, so patients can take the technique taught at the hospital and transfer it directly to their home setting. And patients must be educated with a focus on long-term adherence. "We have to be pragmatic," explains Prof. Denys. "The patient will have 30 or 40 years of performing ISC. To ensure long-term acceptance and adherence to the treatment, please keep it simple".

"If there is no education around UTIs, it will be the failure of intermittent self-catheterisation. It will prevent patients from getting the full benefit of this method of treatment."

**Prof. Pierre Denys**

Tackling these challenges requires a multi-disciplinary approach – and this is where nurses play a central role.

## Guidelines and rules to prevent UTIs

To avoid UTIs, it is crucial that patients learn good techniques when performing ISC, and know the rules they need to follow to avoid UTIs. Nurses can provide a good example by sticking to the guidelines for UTI prevention. "Just because every patient is different, doesn't mean that there are no rules," Prof. Denys explains. "There are rules, and these may be adapted to suit the needs of the patient."

For patients performing ISC, there are four main areas that are key to preventing UTIs:

- **Frequency:** ISC needs to be performed often enough to avoid over-distension and the accumulation of urine and germs in the bladder for an extended period of time. The recommended frequency would be five or more times a day, with a target volume of less than 500 ml urine.
- **Diuresis:** The target is 1.5 L, but here a micturition/ urinary diary is important to help the patient adapt the diuresis to his or her everyday life.
- **Technique:** The correct technique is important to ensure the proper and complete emptying of the bladder.
- **Constipation:** Constipation must be treated properly. A study<sup>3</sup> have documented that using transanal irrigation (TAI) to treat constipation decreases the occurrence of UTIs in this patient group by more than 50%.

## The nurse's role in diagnosing and treating UTIs

### *A full clinical examination*

A full clinical examination should always be performed prior to diagnosing a UTI. If the patient doesn't present with any symptoms, no urine culture is necessary. However, if symptoms are present, a urine culture should always be ordered prior to prescribing antibiotics, and it should never be taken from a urine bag.

### *Proper use of antibiotics*

It is crucial that antibiotics are only prescribed when there is an actual infection. If a patient complains of cloudy urine, the first step should be to get them to increase their fluid intake and then monitor the effect this has on their urine. It's also important not to take a urine culture after the patient has completed the antibiotic treatment.

## Dos and Don'ts when managing UTIs

In the attachment you can see and print Prof. Denys dos and don'ts that he uses in his clinic to educate patients and carers in UTI management.

If you would like to see the full presentation on the nurse's role in infection management, given by Prof. Denys at the Coloplast Continence Days event, please contact your Coloplast representative for information on how to access it.

## References

- 1 Stillman et al; Complications of Spinal Cord Injury After the First Year After Discharge from Inpatient Rehabilitation, Table 4, Arch Phys Med 2017
- 2 Sood et al; Emergency Department Utilization in Patients with Neurogenic Bladder: Contemporary Burden and National Trends in Prevalence, Inpatient Admission, and Associated charges, 2006-2011
- 3 Christensen et al; A Randomized, Controlled Trial of Transanal Irrigation Versus Conservative Bowel Management in Spinal Cord-Injured Patients; Gastroenterology 2006