Neurogenic LUTS and CIC: Nurses' point of view

usually still have detrusor contraction reflexes,



Future nursing research in CIC to address the need for an evidence-based educational protocol



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The general term Neurogenic Lower Urinary Tract Dysfunction (NLUTD) refers to the effects that a neurological condition can have on the urinary tract. The neurological regulation of the organs and their voluntary and reflex control are controlled by different levels of the spinal cord. The risk of lower urinary tract dysfunction in individuals with neurological disease is considerable and can heavily impact on quality of life. [1] Many neurological diseases can affect the filling and/or voiding phase of the micturition cycle. Clean intermittent catheterisation (CIC) is commonly performed by patients and/or by nurses in case of neurogenic urinary retention; nurses have a major role in patient education and training. In this short paper we summarize some of the main characteristics that lead patients with common neurological conditions to developing NLUTD which might require CIC.

NLUTDs largely depend on the site, extent, and clinical history of the neurological lesion. For example, in case of congenital or perinatal dysfunction, normal lower urinary tract function will never be gained by the patient. [1,2] During the patient's lifespan, acute events such as stroke lead to different NLUTDs compared to progressive conditions such as multiple sclerosis stroke. [1,2] Neurological disorders are divided in upper motor neuron lesions, which include supra-pontine (brain) and suprasacral (brainstem and spinal cord) lesions, and lower motor neuron lesions, which include sacral and subsacral lesions, i.e. cauda equina. [3] Usually, patients with suprapontine lesions although they may lose voluntary control of urination, inhibition of bladder contractility, and/or sensation of filling and voiding. This may occur in cases of stroke or head trauma, in which synergistic lower urinary tract function is usually preserved. [1,3] When a lesion is located below the pons in the spinal cord, detrusor sphincter dyssynergy is commonly present. Persons with lesions above T6 can also present autonomic dysreflexia, characterised by headache, bradycardia, hypertension, vaso-constriction in the skin below the lesion, and vasodilation above the lesion. [1,3] Overall, the clinical presentation is variable and depends on the level and completeness of the lesion; in many patients with a lesion above T10 detrusor overactivity is found on urodynamic studies. A low thoracic or sacral injury may result in a contractile deficit of the bladder with an intact external urethral sphincter. Patients with an incomplete lesion may present with a variety of clinical pictures, including impaired compliance, which may result in upper urinary tract damage over time, even in the absence of obvious symptoms. Patients with a lesion above T6 have increased risk of autonomic dysreflexia, a potentially fatal condition with hypertension and bradycardia. [4,5] Motor neuron diseases comprise a group of neurodegenerative diseases involving the upper and/ or lower motor neurons. Neurogenic LUTS related to motor neuron diseases are classified based on urodynamic findings. The most frequent finding is detrusor sphincter dyssynergy, indicating supra-sacral lesions as causes of LUTS. [6]

"During the patient's lifespan, acute events such as stroke lead to different NLUTDs compared to progressive conditions such as multiple sclerosis stroke. [1,2]"

Clean intermittent catheterisation

From nurses' point of view, CIC has long been used as a method of managing urinary retention problems of various kinds (neurological, detrusor hypoactivity). Several international studies have shown the effectiveness of CIC, if correctly performed, in reducing urinary tract infections compared to permanent catheterisation; solutions proposed in the literature and by manufacturers to train patients

include aids such as leg mirrors to make female self-catheterisation easier, sometimes provided with an inflatable leg spreader. Labia separators and special grips that can be activated with wrist movements to grab the catheter and securely inserting it into the urethra are dedicated to patients with impaired hand dexterity, i.e. inability to oppose the thumb to the other fingers. Several of these devices are mentioned and depicted in the EAUN guidelines on intermittent catheterisation (www.nurses.uroweb.org/guideline/catheterisationurethral-intermittent-in-adults/, Appendix H) which also provide a detailed procedure for catheterisation and documents such as a medical travel paper and a voiding diary for patients.

Several guestionnaires dedicated to CIC has been developed over the years. One of these tools investigating patients' difficulties in performing CIC has been developed [10] which takes into account local difficulties: transitory spasm of the striated urethral sphincter, local bleeding, patient's high sensitivity to urethral pain, and disease complication/ evolution such as transitory/increased limb spasticity with spasms and stiffness. Another one [9] is aimed at evaluating patients' adherence to CIC, while a third one [10] investigates patients' satisfaction.

Finally, in past years the literature has offered insights 7. and shared experiences regarding strategies for teaching the current technique [11], which can sometimes be a difficult task as patients have difficulty in learning the rationale for the manoeuvre and neglect the principles of hygiene, correct preparation of the technique and correct execution. The available evidence does not include studies comparing different training methods: the published studies have focused more on the principles than on the results of different training methods. Based on the abovementioned considerations, future nursing research in the important field of CIC should address the need for an evidence-based educational protocol, including adaptation of existing tools and criteria suggested by the existing literature.

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European Association of Urology Nurses

"Spot-on" evidence-based urological nursing care

New research and developments

Dear EAUN members,

is amazing!

Selected from PubMed

Endourology

Nathan A. Hanna N. Rashid A et al. New recommendations to reduce unnecessary blood tests after robot-assisted radical prostatectomy. BJU Int. 2021 Dec;128(6):681-684. doi: 10.1111/ bju.15511. Epub 2021 Jul 6. PMID: 34110673. https://doi.

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The growing evidence in urology nursing care

With this column, the EAUN SIG Groups want to put the spotlight on recent publications in their field of interest. This month's articles have been carefully chosen because of the scientific value from PubMed and represent different methods and approaches in research and development in

urological nursing care.

If you would like to inform us and your colleagues about new initiatives or exiting developments in one of the special interest fields or join a SIG Group, you can contact us using the email addresses below.

Best regards

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Bente Theft

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Bladder cancer

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Urinary Tract Infections

5th Course of the European School of Urology Nursing 9-10 September 2022

Join us at the **5th ESUN Course**

This course gives an update in the field of urinary tract infection, with hands-on and applicable recommendations from Europe's top experts. If you have minimum 2 years working experience in urology, treat patients with urinary tract infections and teach other health care professionals how to treat them, then this might be the right course for you.

The course combines all the best features of an educational event - interaction, group work, latest updates and established evidence-based recommendations.

The preliminary programme consist of the following modules:

Module 1	The aetiology of UTI
Module 2	Microbiology and use of antibiotics – AB resistance
Module 3	UTI in people with indwelling catheter
Module 4	UTI in people performing intermittent catheterisation
Module 5	Group work – Assessment of UTI
Module 6	Prevention and treatment of UTI in people with indwelling catheters
Module 7	Assessment of UTI in people performing CISC – the UTI risk model
Module 8	How to educate patients to prevent UTI
Module 9	Enhancing adherence to CAUTI guidelines Group work continued, including a UTI prevention plan for one's own clinic, evaluation

Registration open: 7 March 2022 Registration closes: 15 May 2022

This course is supported with an educational grant from Coloplast



Registration fee for the full course is €100 for EAUN members and €135 for non-EAUN members

30 places available

The EAUN covers your hotel arrangement for one night and reimburses your travel (flight only).

Please send an email to a.sgravemade@congressconsultants.com before 15 May 2022. A selection will take place based on experience, work environment and educational background. For more info please visit www.eaun.uroweb.org

We are looking forward to receiving your application!

The Organising Committee: Susanne Vahr (DK) & Stefano Terzoni (IT)



EAUNwebinar

Improving psycho-social care of patients with bladder cancer

This webinar will provide an overview of evidence Learning objectives and knowledge gabs in psycho-social care in bladder cancer patients and give the participants an insight to the lived experience of bladder cancer patients.

Moderator Dr. B. Thoft Jensen (DK)

Presenters

- N. Mohamed, New York (US)
- E. Rammant, Ghent (BE)
- A. Haire, London (GB)
- B. Russell, London (GB)
- L. Noes Lydom, Copenhagen (DK)

Date & time

18 May 2022, 19.00 - 20.15 CEST (18.00 - 19.15 GMT)

Aim

The purpose of this EAUN webinar (provided by the EAUN Bladder Cancer Special Interest Group) is to provide an overview of evidence and knowledge gabs in psycho-social care in bladder cancer patients and give the participants an insight into the lived experience of bladder cancer patients.

Paula Allchorne (UK)

Franziska Geese (CH)

Susanne Vahr (DK)

Jason Alcorn (UK)

More information and registration at www.eaun.uroweb.org

EAUN Board

Chair Past chair Board member Board member Board member In this webinar you will:

- Improve awareness of psycho-social care in your clinical practice
- Increase your knowledge of unmet needs in BCa patients and the supportive role of the health care team
- Learn how to improve the patient's experience during treatment and care

CNE & Certificate

This activity will be accredited with 1 CNE credit. After attendance a Certificate of Attendance is available in your MyEAU account.

Registration Registration is free.

speakers.

Support This activity is supported by an educational grant from Medac no involvement in the programme nor

ean sig Special Interest Group Bladder cancer

Board member Tiago Santos (PT) Corinne Tillier (NL) Board member Board member

Jeannette Verkerk (NL)

Ingrid Klinge Iversen (NO) www.eaun.uroweb.org

EAUN22's robust in-depth programme

Meeting promises high-scientific content and dynamic activities

The exemplary programme of this year's 22nd International EAUN Meeting (EAUN22), which will take place from 2 to 4 July 2022 in Amsterdam, the Netherlands will provide excellent opportunities to increase the knowledge of urology nurses: sessions and activities packed with scientific content complemented by social participation that encourage camaraderie.

Learning from the pandemic

Over the past two years, the world has been facing challenges brought about by COVID-19. At present, the pandemic still has enormous consequences for healthcare systems and urological care has not been spared.

Register now for the early fee! Deadline: 1 May 2022

EAUN22 will kickstart with an overview of urological care through a pandemic and lessons (to be) learned. Plenary Sessions on the prevention of urological cancers and the Educational Framework for Urological Nursing (EFUN) will offer additional vital insights on the topic.

affecting patients' quality of life (QoL). A session will focus on the management of the underactive bladder (UAB) and overactive bladder (OAB) which are related to neurological diseases. Another session will centre on the risk factors of catheter-associated urinary tract infections (CAUTI) to determine the impact on patients using an indwelling or intermittent catheter, as well as, to create awareness of the importance of adherence to the EAUN Guidelines to prevent further antimicrobial resistance.

Onco-urology

The EAUN22 scientific programme comprises many sessions on oncological urology themes. The meeting will address the sexual consequences of prostate cancer (PCa) treatment and the need for professional support, as well as, the complications after a radical prostatectomy in relation to risk factors such as body mass index (BMI). Furthermore, EAUN22 will also identify the role of the uro-oncology nurse at the outpatient clinic, how the SONCOS guidelines are

development, practice evaluation and research" will take place pre-congress on Friday, 1 July 2022. The workshop aims to enhance the participants' skills in creating high-quality survey questions; discuss strategies and common pitfalls; and using surveys in clinical settings for programme development and evaluation of interventions.

Hospital visits

One of the EAUN meeting's most popular activities, Hospital Visits, will involve observation of healthcare providers in action at two reputable hospitals in the Netherlands: the OLVG Hospital and the Antoni van Leeuwenhoek Hospital -Netherlands Cancer Institute.

Nurses' dinner

Participants can enjoy a hearty 3-course dinner at Het Groene Paleis (The Green Palace) restaurant where they can unwind and connect with peers on Sunday, 3 July 2022. For more information, please visit www. regulated, and if these contribute to good clinical care. eaun22.org, section Travel & Accommodation & Socials.

register via the online system via www.eaun22.org or by sending an e-mail to registrations@ congressconsultants.com.

EAUN22 promises to provide opportunities, resources, and in-depth knowledge on a wide range of current issues in urology to professionals working in urology care. The meeting is definitely a not-to-be-missed event!

For the complete Scientific Programme visit www.eaun22.org

How to register

Secure your spot early at the meeting. Register now with the early fee via www.eaun22.org/registration to get the best rates of up to 20% off.

Can't attend in person or the full three days? Register online-only, or for 1 or 2 days!



Patient communication

Throughout the meeting, patient communication will be an important theme as several sessions will address this topic. A Thematic Session on overcoming obstacles in patient communication will focus on shared decision making, decision aids and illiteracy. A State-of-the-art lecture will provide insights on the ADT Educational Programme, which has been developed to help prostate cancer patients to manage the side effects of androgen deprivation therapy (ADT). Another Thematic Session will discuss the importance of the patient voice in driving improvements in bladder cancer (BCa) care.

Functional urology

EAUN22 will also provide vital information on functional urology, which often deals with problems Innovation is another spearhead of the meeting with sessions on innovations in endourology, new radiotherapy MRI-guided linear accelerator (MR-Linac) and more. A panel discussion during a Thematic Session on prostate will include the pros and cons of perineal prostate biopsies versus transrectal biopsies. In addition, a State-of-the-art Lecture on the emerging role of genomic screening in treatment decision making will provide the latest updates on genetic screening on BCa and PCa to inform personalised medicine.

Must-attend EAUN22 activities

The meeting offers additional not-to-be-missed activities such as Hospital Visits, the Easy peaSURVEY workshop, and the Nurses' dinner, which is an excellent get-together for participants.

Easy peaSURVEY workshop

The workshop "Easy peaSURVEY: Hands-on survey development for urology nursing programme

There are only limited seats available for the hospital visits and the nurses' dinner. Interested parties can

We look forward to welcoming you at EAUN22 where you will join peers from around the world and help shape the future of urological nursing together.

