

CLEAN INTERMITTENT SELF CATHETERISATION IN NEUROGENIC BLADDER UPDATE AND ROLE OF GENERAL PRACTITIONER

Abdelhafid Meliani

Moulay Driss Ier Rehab Center, Morocco

e-mail: dr.hafidmeliani@gmail.com

Introduction Intermittent catheterization was initially proposed for the first time by Guttman in a sterile manner during the Second World War. This was modified by Lapides in 1972, introducing the concept of clean intermittent catheterization (CIC). It is based on the principle of ensuring safe bladder emptying, several times a day. CIC has multiple indications for bladder-sphincter disorders, whether neurological or not. CIC is nowadays the main tool of management of retention. CIC is currently the first solution in cases of chronic urinary retention in prostates. Role of General Practitioner (GP) For this technique to be performed by the patient himself or by a third party, it requires training for both parties. It also requires long-term monitoring of the effectiveness of emptying and detect any complications that may arise due to catheterization or other factors. One of the links in the chain of follow up is or should be the general practitioner (GP). Therefore, we conducted a prospective study with 500 GPs in 2021. 20 questions were asked by mail. 220 out of 500 questionnaires were analyzed: -Only 5% of GPs correctly defined intermittent catheterization.

The reasons or purposes of catheterization: 90% reported that it serves to protect the upper urinary tract and 80% that it ensures bladder emptying. -80% of physicians reported the correct frequency of catheterization per day. -55% thought they would prescribe sterile gloves for catheterization and 57% would use an antiseptic for cleaning. -Urinary tract infection was considered the leading complication (87%), 36% of GPs consider CBUE necessary, and 65% may prescribe antibiotic therapy for bacteriuria without signs of infection. Conclusion: General practitioners need to improve their knowledge of CIC, its modalities, indications, and how to treat associated urinary tract infections (8). CIC Guidelines((1-5-6-7) Assessing the patient's motor and cognitive abilities to perform his CIC is the first Neurourological assessment, voiding calendar, and urodynamic are basic tools. Certain very simple tests performed by paramedical staff, such as the pencil and paper test (3), give us a quick idea of the patient's capabilities to perform his catheterization. The foundation for the success and effectiveness of Clean, Intermittent Self-Catheterization is education (2-4) of the patient, the trainers, whether it be the nurse, physiotherapist, GP or family member in charge of catheterization. The training sessions should be repeated as possible. -Compliance(2) of patient is an important factor. -Continuous monitoring by the rehabilitation physician and/or the nurse and general practitioner remains essential as a team work. -The frequency of self-catheterization per day is 3 to 5, depending on urine output and voiding schedule, while respecting sleep. - The volume of drainage should not exceed 400 to 500 ml. -The most common complication of CIC is infection.

Bacteriuria does not necessarily require antibiotic treatment. -Long-term antibiotic treatment promotes the development of resistance. -A history of prolonged indwelling catheterization is a risk factor for chronic infections. -Prostatitis comes first, followed by epididymitis and urethritis. -Urethral strictures and false passages increase over time. The use of lubricated catheters can improve this situation. To compare with indwelling catheter, there are other advantages with CIC : -Fewer barriers to intimacy and sexual activity when compared to other catheters (IUCs or external collection devices).

Improves quality of life, body image, self-esteem, and peer relationships; - it promotes independence and control of bladder when schedule is tailored to individual lifestyle. Conclusion The CIC or Self CIC, is the gold standard technique for managing chronic retention . The best preventive measure remains proper education for all those involved in CIC and, essentially, the patient's compliance and involvement.

Keywords: Clean Intermittent catheterization neurogenic bladder GP

References

1. [https://doi.org/10.1016/S0022-5347\(17\)61055-3](https://doi.org/10.1016/S0022-5347(17)61055-3) [2] Ruffion, A., de Sèze, M., Denys, P., Perrouin-Verbe, B., Chartier-Kastler, E., Groupe d'Etudes de Neuro-Urologie de Langue Française (2007) Groupe d'Etudes de Neuro-Urologie de Langue Française (GENULF) Guidelines for the Management of Spinal Cord Injury and Spina Bifida Patients. *Progrès en Urologie*, 17, 631-633. [https://doi.org/10.1016/S1166-7087\(07\)92379-9](https://doi.org/10.1016/S1166-7087(07)92379-9)
2. Chai T, Chung AK, Belville WD, Faerber GJ. Compliance and complications of clean intermittent catheterization in the spinal cord injured patient. *Paraplegia*. 1995;33:161-163
3. Amarenco G, Guinet A, Jousse M, Verollet D, Ismael SS. Pencil and paper test: a new tool to predict the ability of neurological patients to practice clean intermittent self-catheterization. *J Urol*.
4. Martins G, Soler ZA, Batigalia F, Moore KN. Clean intermittent catheterization: educational booklet directed to caregivers of children with neurogenic bladder dysfunction. *J Wound Ostomy Continence Nurs*. 2009;36:545-549. [10.1097/WON.0b013e3181b41301](https://doi.org/10.1097/WON.0b013e3181b41301). [DOI] [PubMed]
5. Australian and New Zealand Nurses Society. (2019). Catheterisation clinical guidelines. https://www.anzuns.org/wp-content/uploads/2015/03/ANZUNS-Guidelines_Catheterisation-Clinical-Guidelines.pdf
6. Gamé, X, Phé, V., Castel-Lacanal, E., Forin, V., de Sèze, M, Lam, O., Chartier-Kastler, E, Keppenne, V., Corcos, J., Denys, P., Caremel, R, Loche, C.M., Scheiber-Nogueira, C., Karsenty, G., & Even, A. (2020). Intermittent catheterization: Clinical practice guidelines from Association Française d'Urologie (AFU), Groupe de Neuro-urologie de Langue Française (GENULF), Société Française de Médecine Physique et de Réadaptation (SOFMER) and Société Inter - disciplinaire Francophone d'Urodynamique et d
7. Groen, J., Pannek, J., Diaz, D.C., Del Popolo, G., Gross, T., Hamid, R., Karsenty, G., Kessler, T.M., Schneider, M., Hoen, L., & Blok, B. (2016). Summary of European Association of Urology (EAU) Guidelines on Neuro-Urology. *European Urology*, 69(2), 324-333. <https://doi.org/10.1016/j.eururo.2015.07.071>
8. Evaluation of management of patients under clean intermittent catheterization by general practitioners : S. Zouari, A. Saadi, M. Chakroun, H. Boussaffa, A. Bouzouita, A. Derouiche, R. Ben Slama, H. Ayed,