



Editorial Comment: Long-term effectiveness and complication rates of bladder augmentation in patients with neurogenic bladder dysfunction: A systematic review

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Neurourol Urodyn. 2017Sep;36(7):1685-1702

DOI: 10.1002/nau.23205 | ACCESS: 10.1002/nau.23205

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COMMENT

International guidelines support a timely diagnosis and an individualized treatment to prevent upper and lower urinary tract deterioration in neuro-urological patients (1, 2). Reconstructive surgery may be needed in high-risk patients, who failed conservative treatment for neurogenic detrusor overactivity (3). Hoehn et al. performed a PRISMA systematic review to evaluate effectiveness and safety of bladder augmentation for adult neuro-urological patients. A total of 20 studies including 511 patients were eligible for inclusion. Primary outcomes were assessed in 16 of the 20 studies and showed improved quality of life and anatomical changes as well as stable renal function. Continence rates were reported in only 14 series. A total of 225 patients either were incontinent or had an indwelling catheter preoperatively. Only 30 patients were not completely continent postoperatively (87% success rate). Long-term complications continued up to 10 years postoperatively, including bowel dysfunction in 15% of the patients, stone formation in 10%, five bladder perforations and one bladder cancer. These outcomes reinforce both the role of bladder augmentation in high-risk neuro-urological patients and the importance of longer-term follow-up. However, the studies included in this systematic review had a low-level of evidence (mostly level 4; only one level 3 study). Therefore, further research initiatives should include structured quality of life assessments, detailed description of inclusion and

exclusion criteria, surgical technique and post-operative complications. Perhaps an international registry/working group may overcome these inherent limitations and increase the level of evidence in the near future.

CONFLICT OF INTEREST

None declared.

REFERENCES

1. Groen J, Pannek J, Castro Diaz D, Del Popolo G, Gross T, Hamid R, et al. Summary of European Association of Urology (EAU) Guidelines on Neuro-Urology. *Eur Urol.* 2016;69:324-33.
2. Sekido N, Igawa Y, Kakizaki H, Kitta T, Sengoku A, Takahashi S, et al. Clinical guidelines for the diagnosis and treatment of lower urinary tract dysfunction in patients with spinal cord injury. *Int J Urol.* 2020;27:276-88.
3. Hamid R, Averbeck MA, Chiang H, Garcia A, Al Mousa RT, Oh SJ, et al. Epidemiology and pathophysiology of neurogenic bladder after spinal cord injury. *World J Urol.* 2018;36:1517-27.

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Int Braz J Urol. 2021; 47: 191-2