

Long-term use of intra-detrusor Botulinum Toxin A in Adults with Spina Bifida # 21493

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Introduction

- Intra-detrusor Botulinum Toxin (BTX) is an effective treatment for neurogenic detrusor overactivity.
- BTX-A is well established in children with Spina Bifida (SB) and adults with Multiple sclerosis and spinal cord injury.
- Little evidence has been reported for BTX-A treatment in adults with SB.

Aim: report on the long-term clinical outcomes of intra-detrusor BTX in adult patients with SB.

To include assessment of patient satisfaction, quality of life, treatment durability and need for escalation for urinary diversion.

Methods

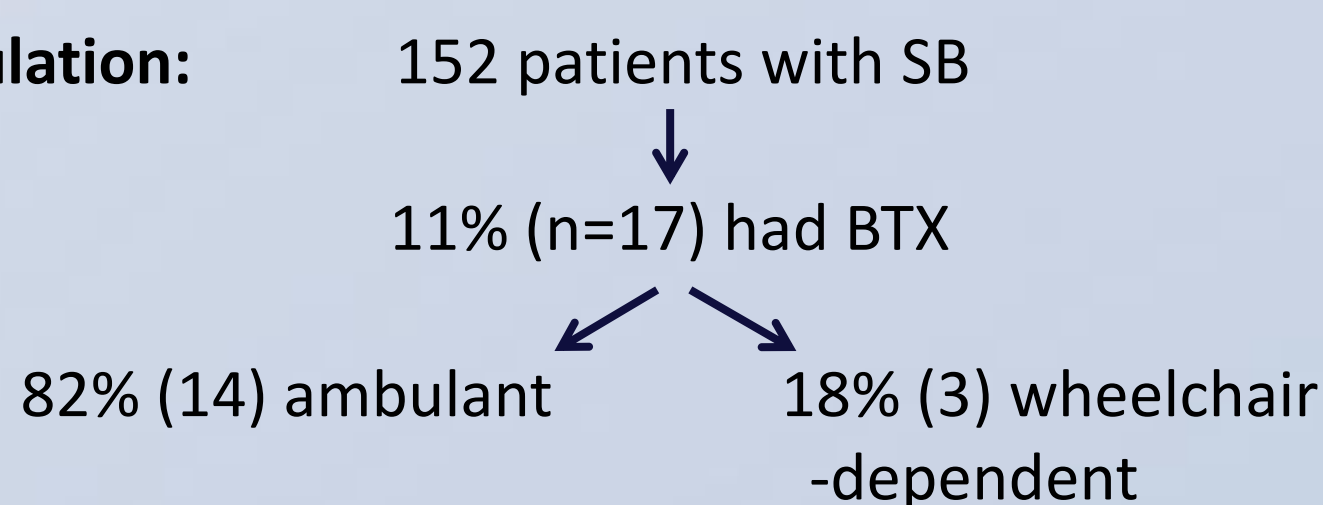
Retrospective review of all SB patients at a large neurosciences centre.

All patients seen within the Urology department and treated with Intra-detrusor BTX were identified.

Demographics, clinical information, quality of life and pre-urodynamic data were collected.

Results

Population:



29% (n=5) started BTX as a child

Average age started on BTX: 11YO (4-19)

Average rounds of BTX per patient: 6 (1-13)

Total number of injection rounds: 89

Average follow up: 11 years (0.25 – 20)

59% Dysport (1000U) : 41% Onabotulinumtoxin A (250U)

Pre and Post BTX comparisons:

All patients were on antimuscarinics pre-BTX.

76% (n=13) performed CISC both pre and post BTX.

53% (n=9) patients had reconstructive urinary tract surgery pre-BTX and 29% (n=5) patients needing escalation to cystoplasty, urinary diversion, renal transplantation despite BTX [Table 1].

Pre-operative urodynamic findings included Detrusor overactivity, loss of compliance, stress urinary incontinence and reflux. [Graph 1] demonstrates this alongside % of patients with recurrent UTIs.

Quality of life scores demonstrate an improvement in both ICIQ-OAB and Bother scores post BTX treatment. [Graph 2]

Simple Likert score was used to score overall patient self-reported benefit with an average of 1.5/3 [Chart 1].

Graph 1: Pre-operative Urodynamic Findings

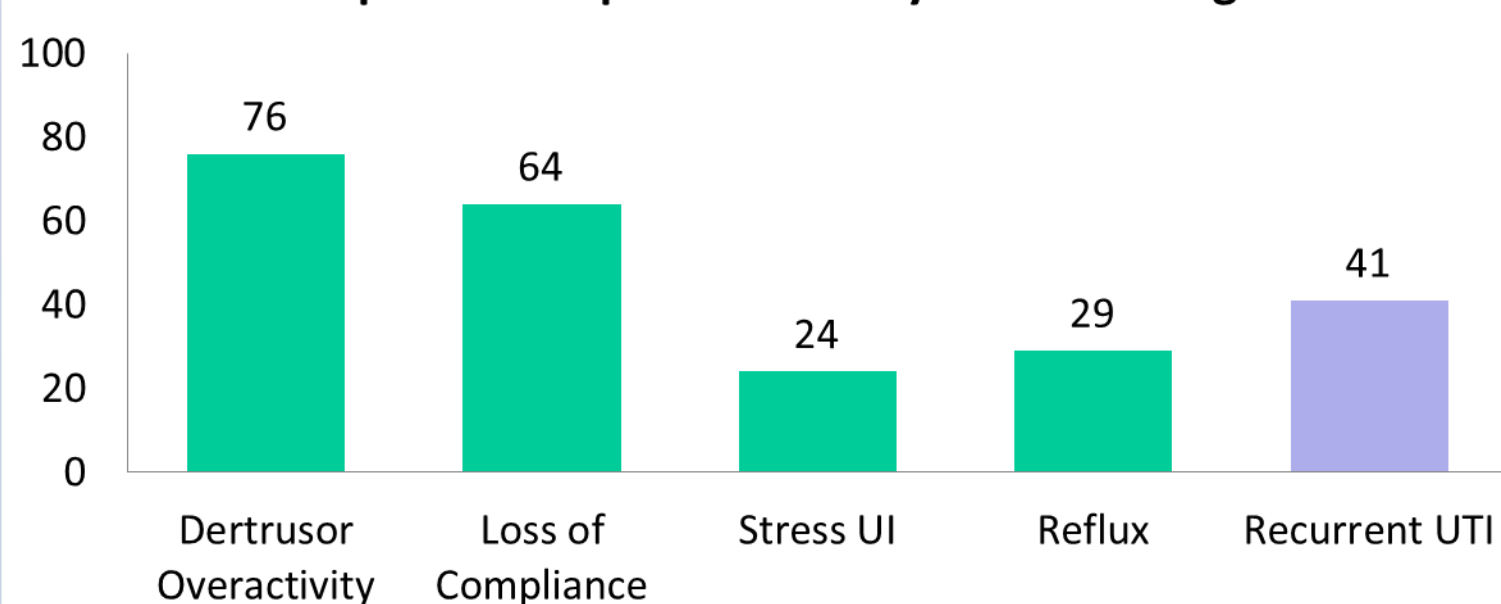


Table 1: Reconstructive surgeries pre and post-BTXA

Pre- BTX A	Post- BTX A
Augmentation Cystoplasty x 2	Augmentation Cystoplasty x2
Mitrofanoff x 3	Ileal Conduit x1
Suprapubic Catheter x 1	Renal Transplant x1
Rectus Sheath Sling x 1	Pending urinary diversion x1
Artificial Urinary Sphincter x 2	
Antegrade Colonic Enema x 3	

Graph 2: Pre and Post BTXA Quality of Life scores

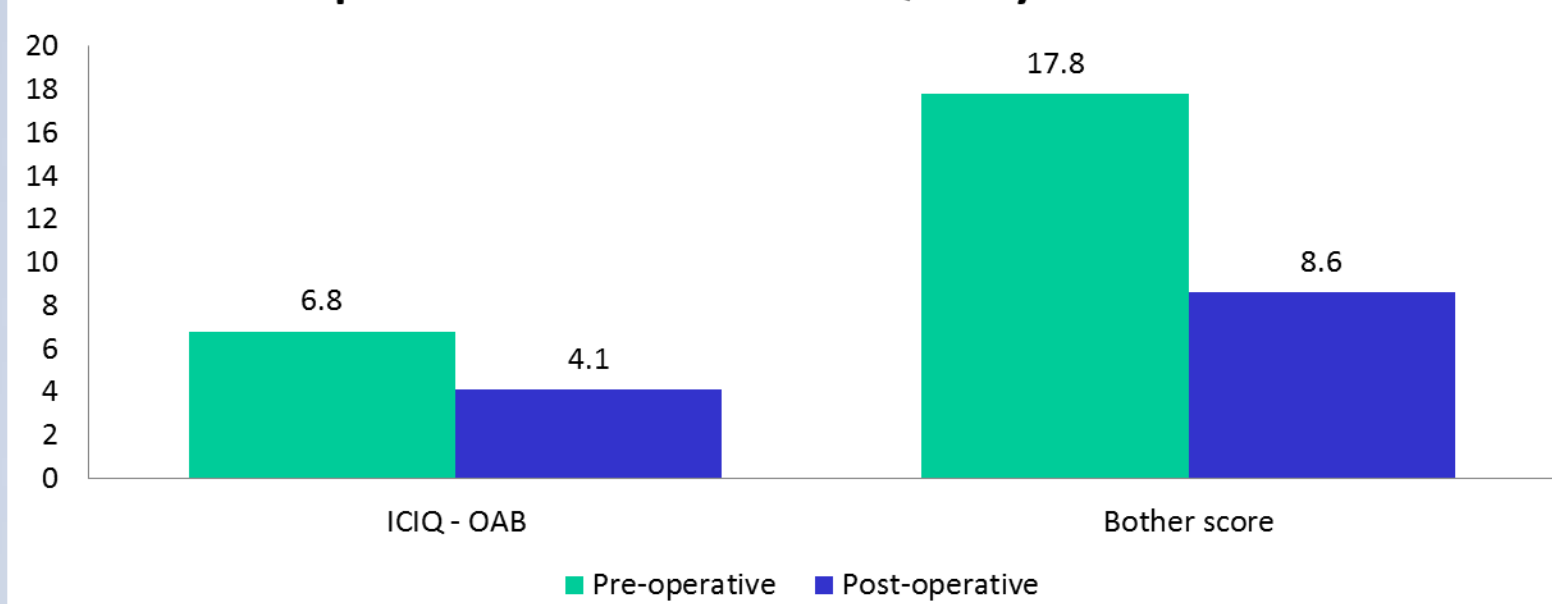
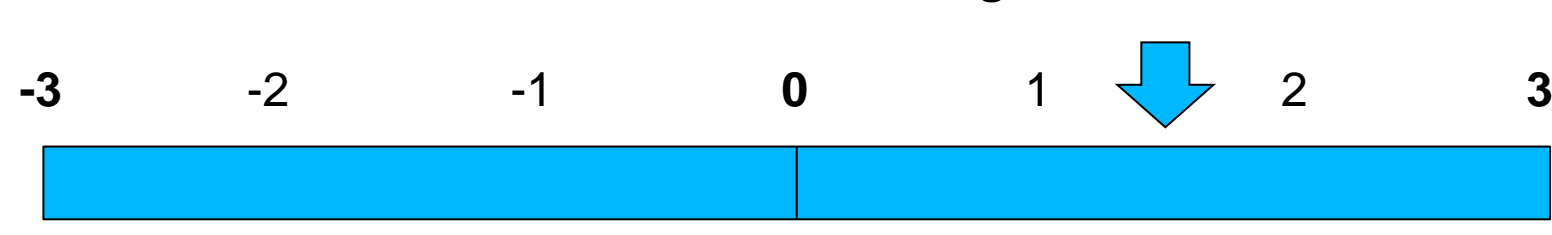


Chart 1: Likert scale demonstrating overall benefit



Conclusions

This is a very complex group of patients, some with multiple urodynamic abnormalities.

Competing factors have been identified in this group that may lead to discontinuation of BTX use. Such factors include loss of bladder compliance, recurrent UTI, vesicoureteric reflux and stress urinary incontinence.

14/17 (82%) elected to have >1 round of BTX-A, with positive self-reported satisfaction and improved QOL scores.

Further data is needed to form conclusive evidence of predictors of outcome in Adults with SB.

References

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2. Urogenital Symptoms in Neurologic Patients Jalesh N. Panicker. Continuum (Minneapolis) 2017;23(2):533–552
3. Intradetrusor Injections of Botulinum Toxin A in Adults with Spinal Dysraphism. Benoit Peyronnet, Alexia Even. The Journal of Urology, 2018;200:875 – 880