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# The Influence of Bowel Management on Urodynamic Findings in Spina Bifida Children with Overactive Bladder and Detrusor Sphincter Dyssynergia.

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# PURPOSE



To examine the effects of bowel management on urodynamic findings in spina bifida children with overactive bladder (OAB) and detrusor sphincter dyssynergia (DSD).

# MATERIAL

Between 2014 and 2019 we prospectively evaluated 39 consecutive spina bifida children with OAB and DSD (18 (46.2%) boys and 21 (53.8%) girls, aged 4 to 16 years; mean age  $9.5 \pm 3.7$  years) who received bowel management and treated their bowel dysfunction with an aim of alleviates the symptoms of constipation, prevents constant overdistension of the rectosigmoid, provides regular emptying of the colon and faecal continence.

# METHODS



Bowel management included daily enema, laxative application and a special diet who was performed during 12 months.

All children had undergone urodynamic studies before and after starting bowel management, with no changes in their urological treatment.

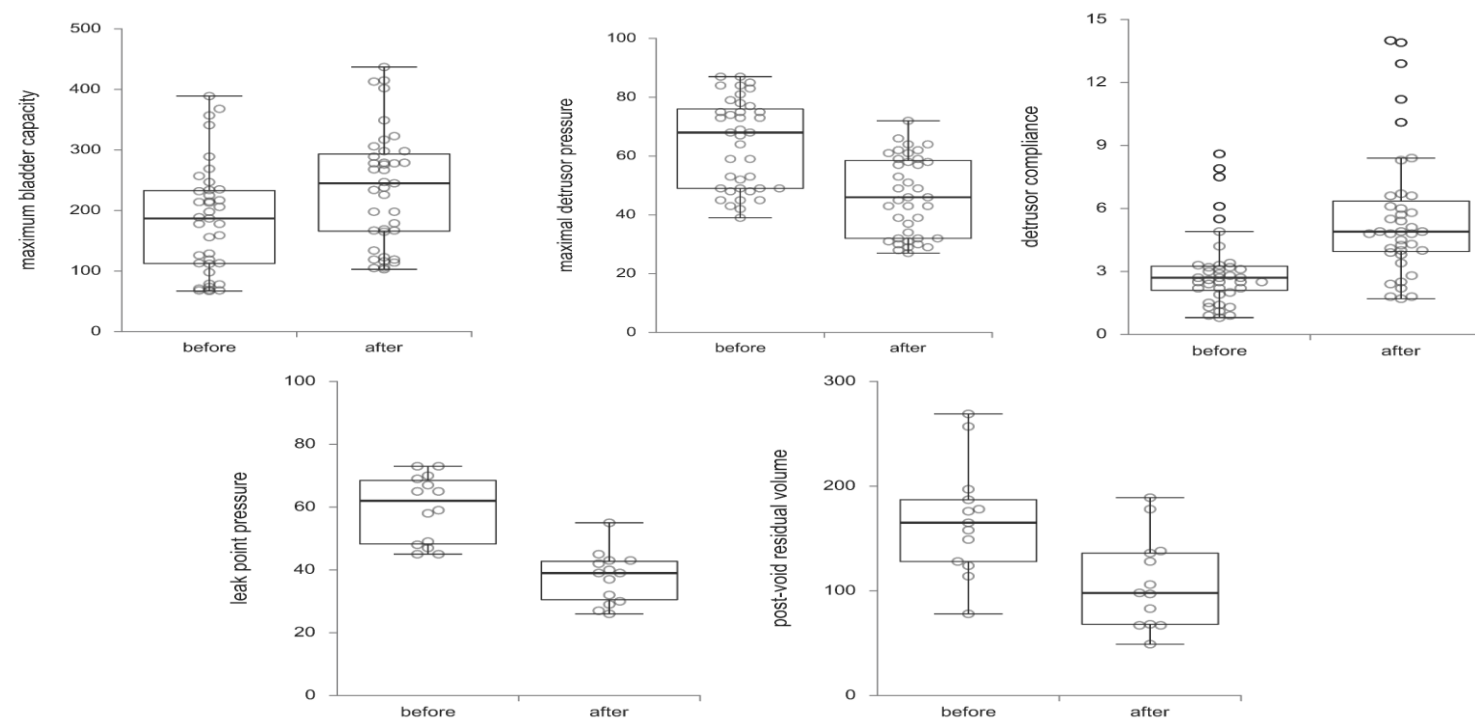
# RESULTS

Bowel Management caused an increase in maximum bladder capacity from 183.0 (112.0-234.0) to 237.0 (165.0-298.0) ( $p < 0.001$ ), a decrease in maximal detrusor pressure from 64.3 (49.0-77.0) to 46.4 (32.0-59.0) cm H<sub>2</sub>O ( $p < 0.001$ ) and an increase in detrusor compliance from 3.0 (2.0-3.3) to 5.6 (3.9-6.6) mL/cm H<sub>2</sub>O ( $p < 0.001$ ).

# RESULTS

There was also significant reductions in leak point pressure from 62.0 (48.0-69.0) to 39.0 (30.0-43.0) cm H<sub>2</sub>O ( $p = 0.001$ ), and significant reductions in post-void residual volume (PVR) from 165.0 (128.0- 187.0) to 98.0 (68.0-136.0) ml in our patients who could achieve spontaneous voiding ( $p = 0.001$ ).

# RESULTS



# CONCLUSIONS

Administering bowel management have favourable effect on bladder function and significantly improve urodynamic findings in spina bifida children with OAB and DSD. Therefore, bowel management should be form an integral part of the treatment in spina bifida children with OAB and DSD.



# THANK YOU!

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