

Urological Outcomes of 5-Year-Old Patients Following Open Prenatal Spina Bifida Aperta Repair

Antonin Prouza, Luca Mazzone, Beth Padden, Ueli Möhrle, Maya Horst

Introduction

We evaluated the urological outcomes in 5-year-old children who underwent open prenatal spina bifida aperta repair (OPSBAR) at our institution.

Methods

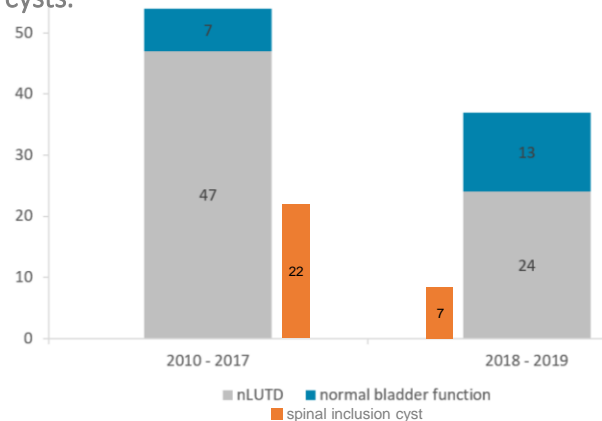
A total of 91 patients who underwent OPSBAR were subjected to a standardized follow-up protocol at our institution.

We reviewed their continence status, the need for clean intermittent catheterisation (CIC), the use of anticholinergics, as well as the urodynamic and ultrasound findings recorded using a RedCap database.

Results

Twenty-two percent of children with OPSBAR (20/91) showed normal bladder function without evidence of neurogenic lower urinary tract dysfunction (nLUTD).

A subgroup analysis demonstrated a higher proportion of children with normal bladder function after 2018 (35% vs. 12%, $p < 0.05$), in line with decreased incidence of dermoid spinal inclusion cysts.



Conclusions

Open prenatal spina bifida aperta repair substantially reduces the risk of developing nLUTD in children with spina bifida.

A decreasing occurrence of spinal inclusion cysts, attributed to improved operating technique, further amplifies the positive effect of OPSBAR.