

IS LONG-TERM FOLLOW-UP REQUIRED FOR ADULT MYELOMENINGOCELE PATIENTS AFTER LOWER URINARY TRACT RECONSTRUCTIVE SURGERY?

Hypothesis / aims of study:

The majority of literature evaluating neurogenic bladder (NGB) in myelomeningocele (MMC) patients (pts) focuses on pediatric pts. Due to significant improvements in care most reach adulthood. A small but significant number of patients ultimately require lower urinary tract reconstructive surgery (LUTRS) because of NGB. Our objective was to determine if long-term follow up (F/U) is required for those who have had prior LUTRS.

Study design, materials and methods:

A retrospective review of MMC pts with NGB after LUTRS was performed.

Results:

118 adults with NGB secondary to MMC were identified, 55/118(65%) had LUTRS with a mean age of 23.4 years (range 5-42) at LUTRS and a mean age of 37.7 years (range 20-60) at last F/U with a mean follow-up of 11 years (range 1-29 years) post-LUTRS. A majority of patients (48/55 - 87%) manage their bladder with CIC, either through their native urethra (28/48–58%) or continent stoma (20/48 – 42%). Prior LUTRS includes: augmentation enterocystoplasty with or without continent stoma (40/55 - 73%), construction continent stoma alone (14%), Kock Pouch (13%). In addition 6/55 (11%) pts had a concomitant outlet surgery (sling, bladder neck closure or AUS) at time of LUTRS and 9/55 (16%) subsequently had outlet surgery after their initial reconstruction. Seven pts have undergone revision of their continent stoma and 3/7 had Kock Pouch revision. The majority of pts have normal renal function based on creatinine ($0.77\pm 0.59\text{mg/ml}$) and renal ultrasound (US) (41/55 pts). Kidney stones were found in 4/55 studies and 16/55(29%) pts had a stone in their bladder or “pouch”. Bladder/pouch stones were treated endoscopically in 15/16 pts with 4 pts requiring a second procedure.

Interpretation of results

MMC pts manage their bladder after LUTRS with CIC. About third of MMC pts had concomitant or subsequent outlet surgery. 13% of pts underwent revision of the continent stoma or Kock pouch. Majority of pts remained with normal renal function and renal US. Kidney/Bladder/Pouch stones were the most frequent finding required subsequent surgery. Our results of stoma or pouch revision and frequency of stone formation with subsequent need in their removal by endoscopic procedures were similar to those published elsewhere for diverse populations of NGB [1,2].

Concluding message

Pts with MMC and NGB who underwent LUTRS still require regular F/U. Issues include the need to screen for stone disease, upper tract changes and the possibility of a need for revision surgery for continence either at the level of the stoma or outlet.

References

1. Ginsberg DA. Management of the Neurogenic Bladder in the Female Patient. Current Urology Reports 2006, 7:423–428
2. Ginsberg DA. Management of Neurogenic Voiding Dysfunction in the Male Patient. Current Bladder Dysfunction Reports 2007, 2:173–179

Disclosures

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