

## **Efficacy and Complications of Total Continence Surgery**

**Introduction and Objective:** Total continence surgery is becoming more important recently in patients with myelomeningocele and spinal cord injury. With the advent of intermittent catheterization the need for this type of management has become more important and common. The concern is whether there is efficacy, and moreover, since the surgery may be technically challenging, whether the complication rate is acceptable. We examined our results over a 5-year period, regarding efficacy and complications.

**Materials and Methods:** In nine patients total continence surgery was performed, defined as an augmentation cystoplasty, bladder outlet augmentation, and Malone Antegrade Continence Enema (MACE). There were 5 women and 4 men. The women all had midurethral slings or hypercontinent slings. The men all had external urinary sphincters (AMS 800). The ages ranged from 16-59. All procedures were done open and in one operation.

**Results:** Currently, 7 patients are continent of stool and urine. One has urinary leakage and one has fecal soilage. The patient with urinary incontinence has failed an artificial urinary sphincter and is awaiting repair. The patient with fecal soilage has been only intermittently compliant with his bowel regimen. Five patients have had to have stomal revisions for the MACE tube or the Monti urinary stoma. One patient had vaginal erosion of her mid-urethral sling. Bladder calculi were seen in one patient at 5 years out. No ureteral or renal calculi were noted. Urinary tract infections were common, but pyelonephritis occurred only twice. Most of the infections were deemed colonization. There were no episodes of wound infections or dehiscence, but two patients developed ventral hernias. Two patients had explantations of their AMS 800 sphincters, both from erosion. One had complete urethral closure and is dry.

**Conclusions:** Total continence surgery is feasible and efficacious, but in the cost, one must consider a fairly high complication rate.