

285

**Authors:** Chowdhary SK, Narasimhan KL, Eradi B, Rao KLN  
**Institution:** Department of Paediatric Surgery, Advanced Paediatric Centre, Postgraduate Institute of Medical Education and Research  
**Title:** Management of Fecal and Urinary incontinence in a Developing Country-Our experience

Incontinence in children is a neglected area in the developing countries. Our department supported the development of an incontinence service. The preliminary experience has been retrospectively examined on 44 children with urinary or fecal incontinence.

**Aim of the study:**

Examine patient distribution with incontinence among children.  
Evaluation of acceptance of clean intermittent catheterization in our society.  
Outcome of various treatment strategies adopted.  
Compliance of parents and children.

**Method of Study:**

All children with fecal and urinary incontinence between December 1998 and March 2001 were entered on a clinical database. It included name, age sex, address, disease, previous investigations, work up and operation etc. The investigations for fecal and urinary incontinence were carried out on a fixed protocol mutually agreed upon among the consultants. After evaluation, the parents and the child were offered a variety of treatment options with an aim of providing atleast 3 hours dry interval for urinary continence and 12 hours dry interval for fecal continence. Treatment outcome was evaluated in the follow up clinics after institution of medical or surgical treatment. Achievement of desired dry interval was taken as success. Parents and children attendance for follow up on given dates in the clinic was recorded. Their attendance in the clinic for more than eighty percent dates was recorded as good compliance.

**Results:**

44 consecutive children were recruited into the study with urinary or fecal incontinence during this period. 4 had both urinary and fecal incontinence. There were eighteen girls and the rest were boys. The age varied between 1 year and 12 years with a mean of 4.5 years. The diagnosis of urinary incontinence included ectopic ureters(5), exstrophy(6), neurogenic bladder(10), cloacal exstrophy(1), anterior or posterior urethral valves(2), exstrophy epispadias variant(2), post chemotherapy rhabdomyosarcoma(1), Crohn's disease(1). The diagnosis of fecal incontinence included neuropathic bowel (4), cloacal exstrophy(1), pouch colon syndrome(13), Hirschsprung's disease(1), and anorectal malformation(2). Clean intermittent catheterization was offered as a treatment strategy via the natural route or a continent stoma to 19 children. Among 5 girls offered CIC via the natural route. Only one accepted it as an option. Seven children use CIC via a continent stoma.

The treatment strategies offered for fecal incontinence were retrograde colonic washes or Malone antegrade colonic enema (MACE) using bowel wash appliance or a similar locally made appliance. 16 children chose retrograde bowel wash as the first option. 12 hour dry interval was achieved in 19 of 21 children. (73%). For urinary incontinence, the strategies included CIC and oxybutynin(6), ureteral reimplant/ pyelopyelostomy/ upper pole nephroureterectomy(5), Bladder augment/ Mitrofanoff/ Young Dees(6), Ureterosigmoidostomy(2), Indiana pouch(1), and use of desmopressin. Among surgically reconstructed children, 3 hour dry interval was obtained in 11 of the 14 children.

The overall compliance is good with only 6 children fallen out of follow up or having refused treatment, the most difficult neuropathic bladder.

**Conclusion:**

In atleast 60% of incontinent children medical and surgical treatment can achieve excellent outcome even in the developing world. CIC is not well accepted in the developing society especially in females. Significant inputs are required in terms of patient learning aids to promote the treatment of in incontinence.