

DIFFERENT TYPES OF CONTINENT CATHETERIZABLE URINARY STOMAS ADVANTAGES AND DISADVANTAGES

Essay

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وَأَنْزَلَ اللَّهُ عَلَيْكَ الْكِتَابَ وَالْحِكْمَةَ
وَعَلَّمَكَ مَا لَمْ تَكُنْ تَعْلَمُ وَكَانَ فَضْلُ اللَّهِ
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LIST OF ABBREVIATIONS

Abbrev.	Meaning
BMD	Bone Mineral Density
CIC	Clean intermittent catheterization
CT scan	Computed tomography scan
CUD	Continent Urinary diversion
HCO ₃	Bicarbonate
K	Potassium
MACE	Malone Antegrade continent enema
Na	Sodium
OSP	oral sodium phosphate
SIU	Societe Internationale d'urologie
TAP	Transverse ascending pouch
TDP	Transverse descending pouch
TSF	Tubular skin flap
UTI	Urinary tract infection
VQZ	V-quadrilateral Z plasty
WHO	World Health Organization

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Introduction

Introduction

Catheterizable channels are essential in many patients to obtain urinary continence. The indication for a urinary catheterizable stoma is any difficulty in catheterizing the native urethra. The difficulty may be because of pain, tortuosity, or impossibility for the patient to reach the meatus (*Suser et al., 1997*).

Continent cutaneous urinary diversion is a well-accepted method of treatment for end-stage bladder disease in children. The concept adopted in the pediatric population consists of creating a reservoir (mostly from bowel) and an outlet channel to provide a catheterizable abdominal stoma. The appendix and the Yang-Monti channel are the most commonly used techniques. An ileal flap conduit adjacent to the reservoir and recently the use of skin flaps to create catheterizable channels has also been reported as alternatives (*Cervellione, 2010*).

The Mitrofanoff principle for creation of a continent catheterizable stoma using the appendix has been a main stay in the armamentarium of pediatric urologists and reconstructive surgeons since it was originally described in 1980. This principle involves the use of a small caliber tube implanted into a compliant bladder or reservoir with a non-refluxing anastomosis to provide convenient and effective method to empty the bladder (*Mitrofanoff, 1980*). Application of this technique have expanded to include the use of ureter, tapered ileum stomach, tubularized bladder flaps, and transverse tubularized bowel as originally described by *Yang (1993)* and *Monti et al (1997)* and later modified by *Casale (1999)*.

Suitable appendiceal length is the rate-limiting factor in constructing a conduit to the umbilicus. By tubularizing the base of the transected cecum, enough length to connect the conduit from the base of the bladder to the umbilicus have consistently gained. Cecoappendicovesicostomy (CAV) was described as a safe