Heterotopic continent ileocolic urinary diversion of the Miami/Indiana type: A preliminary monocentric experience

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OBJECTIVES

Urinary diversion is most often performed as either a non-continent urinary diversion, such as the Bricker procedure, or a continent urinary diversion, such as a neobladder.

The heterotopic continent urinary diversion technique of the Miami/Indiana type, utilizing an ileocolic reservoir with the terminal ileal loop as a continent cystostomy, is a less commonly used technique but may meet the expectations of certain patients in terms of quality of life.

The objective of this study was to report the outcomes of patients who underwent radical cystectomy with heterotopic continent urinary diversion using an ileocolic reservoir of the Miami/Indiana type

METHODS

- Retropectiv Monocentric Study
- Inclusion: All patients who underwent cystectomy with heterotopic continent urinary diversion using an ileocolic reservoir of the Miami/Indiana type between April 2021 and February 2024
- Alternative to:
 - Bladder cancer
 - Radiation-induced cystitis
 - Urethral involvement.
- Primary endpoint : improvement in quality of life, assessed by a PGII score ≤2
- Secondary endpoints :
 - Postoperative complications
 - Stomal continence
 - Number of catheterizations per 24 hours.

RESULTS

12 patients included

- 4 bladder cancer
- 8 fistula or symphysitis
- Rate of major complications: 41%
- At 3 months, 9 patients (75%) met the primary endpoint : PGII ≤2
- At the last follow-up, 10 out of 12 patients (83.3%) were using their reservoir and continent cystostomy
 - 90% stomal continence
 - 1 requiring Deflux
 - 1 stomal revision
 - 1 Bricker conversion
 - 1 death (cancer)
- At 3 months: 6 SC/day Mean volume: 300 mL
- At 1 year : 5 SC/day Mean volume : 400 mL

Number of patients	12
Previous abdominal surgeries	11/12 (92%)
Pre-operative incontinence	10/12 (84%)
Operation time (mean)	410 min
Blood loss (mean)	275 ml
Length of hospitalisation	16 days
Complications: - Clavien 1-2 - Clavien 3b - Clavien 4	12/12 (100%) 7/12 (58%) 4/12 (33%) 1/12 (8%)
Mono-J removal (median)	21 days
Caecostomy removal	30 days

CONCLUSION

Last resort use in :

- Patients ineligible for orthotopic continent diversion
- Patients unwilling to alter their body image
- Severe acute complications
- Good functional outcomes
- Good continence : anti-reflux mechanism of the Bauhin valvulae