

## THE CROSSFOLDED ILEAL CONTINENT CUTANEOUS POUCH COMBINED WITH AN AFFERENT TUBULAR ISOPERISTALTIC SEGMENT IS A VIABLE OPTION FOR URINARY DIVERSION.

### Hypothesis / aims of study

The orthotopic ileal bladder substitute combined with an afferent isoperistaltic tubular segment was designed in 1984<sup>1</sup>. In the meantime it has stood the test of time for more than 25 years<sup>2</sup>. If the urethra is not useable (non-functional, excised) for orthotopic reconstruction, the continent catheterisable cutaneous pouch based on this ileal reservoir offers an alternative.

### Study design, materials and methods

The aim was to retrospectively evaluate the results of the crossfolded ileal continent cutaneous pouch and assess whether it can meet the following goals: low pressure reservoir so preserving the upper tract, easy to catheterize, continent with an acceptable complication rate and an improvement in quality of life.

Between Dec 1996 and Aug 2009, 55 patients underwent continent cutaneous urinary diversion using a crossfolded ileal reservoir according to Goodwin's cup patch technique<sup>19</sup>. The outcome data were entered prospectively in the department database following patients informed consent. Postoperative complications related to the pouch and nipple, ureter, kidney, general, metabolic complications, conversion to an ileal conduit were all recorded. The questionnaire on quality of life, patient satisfaction and difficulty in catheterization were self filled and data were collected prospectively by nurse specialists during follow-up.

### Results

55 patients (47 female, 8 male) received a continent ileal pouch. Median age was 53.0 years(range 15 - 73.9). Median follow-up is 3.3 years ( range 0.1 to 9.7 year). The common indications were: bladder cancer and recurrent cervical cancer after previous radiotherapy and bladder infiltration.

The nipple was constructed from either the appendix(n=32), a transversely tubularized ileal segment (n=19) (Yang-Monti) or a fallopian tube(n=4). No intraoperative or post-operative mortality was observed. The mean pouch capacity was 463 ml.

15 (27.3%) patients developed nipple stenosis: 13 (86.7%) were simply dilated/ incised in the outpatient clinic, 77% required 1 to 2 incisions. 8 (14.5%) patients required revision for incontinence. 3 conversions to an ileal conduit were performed.

92.7% patients were completely dry and did not need a pad covering the nipple. 94.5% patients were happy with the pouch and reported improvement in the quality of life after surgery.

### Interpretation of results

The crossfolded ileal continent cutaneous pouch results in a low pressure reservoir thus maintaining upper tract function, is easy to catheterise, continent and ensures patients a good quality of life. Complications such as incontinence or nipple stenosis do occur but can be successfully managed. A longer follow up is needed to make a definitive statement.

### Concluding message

The crossfolded ileal continent cutaneous pouch is a viable option for continent urinary diversion, especially in patients with compromised urethral function, with good patient satisfaction.

### References

- Studer UE, deKenion JB, Zimmern PE. A model for a bladder replacement plasty by an ileal reservoir—an experimental study in dogs. *J Urol* 1985;13:233—248.
- Studer UE, Burkhard FC, Kessler TM, Thalmann G. Twenty years experience with an ileal orthotopic low pressure bladder substitute—lessons to be learned. *J. Uro.* Vol. 176, 161-166, July 2006

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<b>Is this a clinical trial?</b>	No
<b>What were the subjects in the study?</b>	HUMAN
<b>Was this study approved by an ethics committee?</b>	No
<b>This study did not require ethics committee approval because</b>	not applicable at our institution
<b>Was the Declaration of Helsinki followed?</b>	Yes
<b>Was informed consent obtained from the patients?</b>	Yes

