

# (PD41-07): Self-perception, Quality of Life and Ease of Catheterization in Patients with Continent Urinary Diversion with the Mitrofanoff Principle

*Julián Chavarriaga<sup>1</sup>, Nicolás Fernández<sup>1,2,3</sup>, María A. Ocampo<sup>1</sup>, John Bolivar<sup>1</sup>, German Patiño<sup>1,4</sup> Jaime Perez<sup>1,2</sup>*

1. Division of Urology, Hospital Universitario San Ignacio. Pontificia Universidad Javeriana. Bogotá, Colombia.
2. Division of Urology. Fundación Santa Fe de Bogotá. Colombia
3. Division of Urology. Hospital for SickKids. University of Toronto. Canada.
4. Division of Urology University of California San Francisco, United States of America.



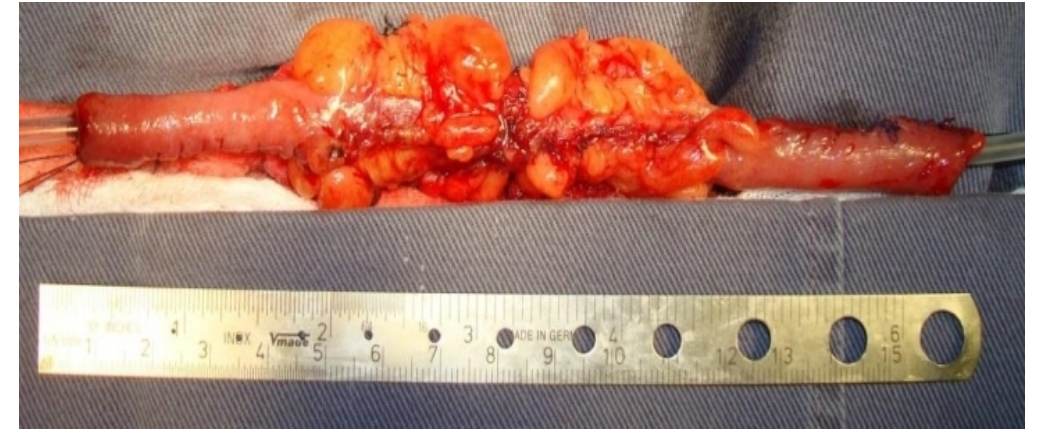
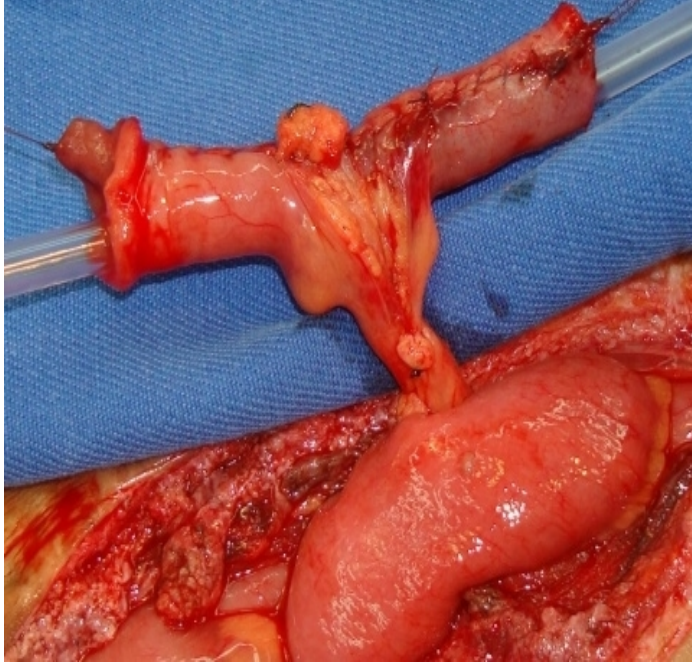
# Introduction

- Paul Mitrofanoff described the “trans-appendicular continent cystostomy” in 1980.
- The surgery aims to create an easily accessible, cosmetically acceptable stoma and a continent, catheterizable conduit.
- Bringing the appendix or the ileum into the bladder hemmed to the bladder by an antireflux anastomosis technique.

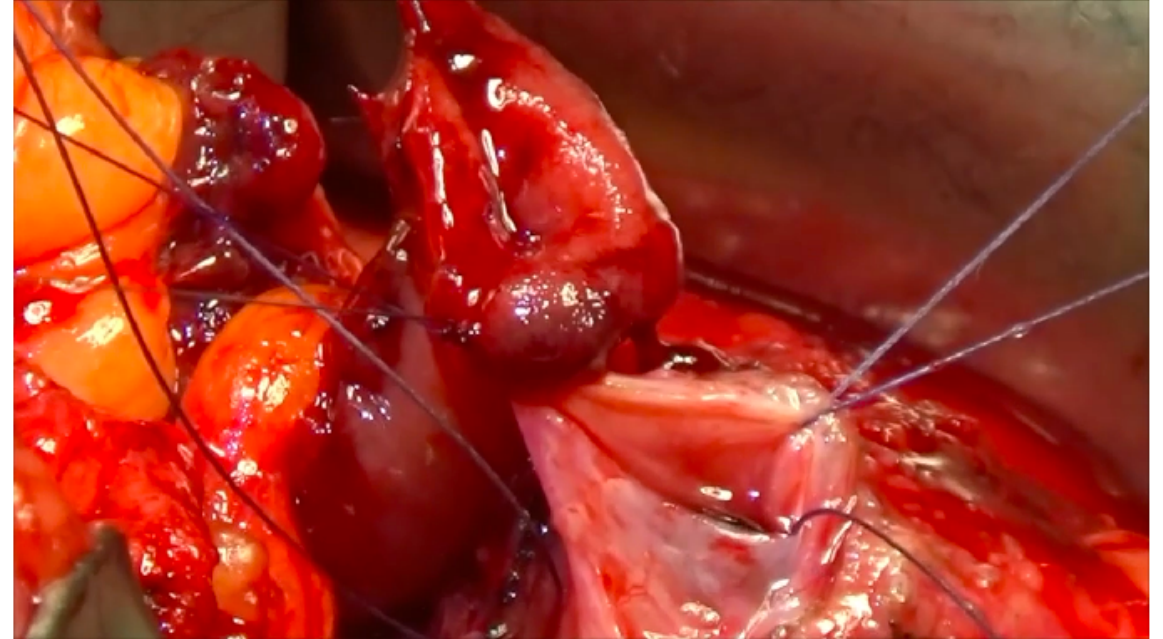
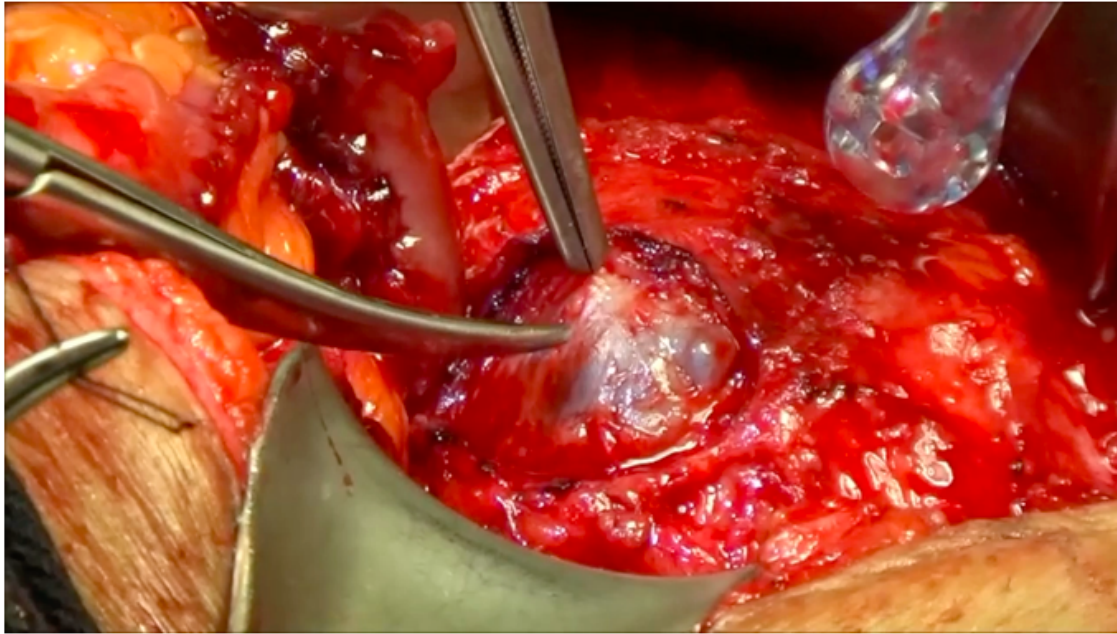




# Mitrofanoff, Yang-Monti, Double Monti, Casale

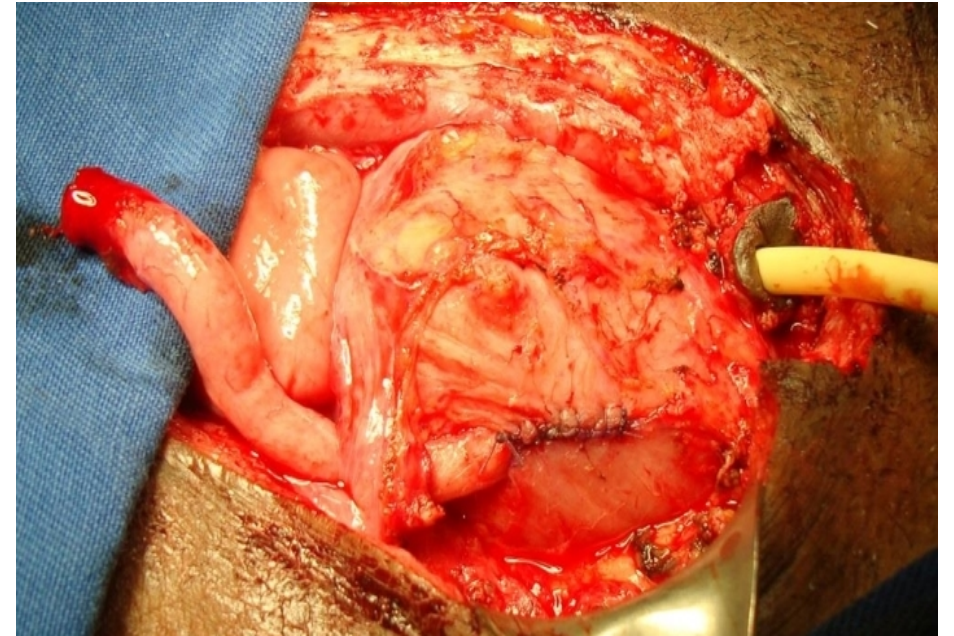
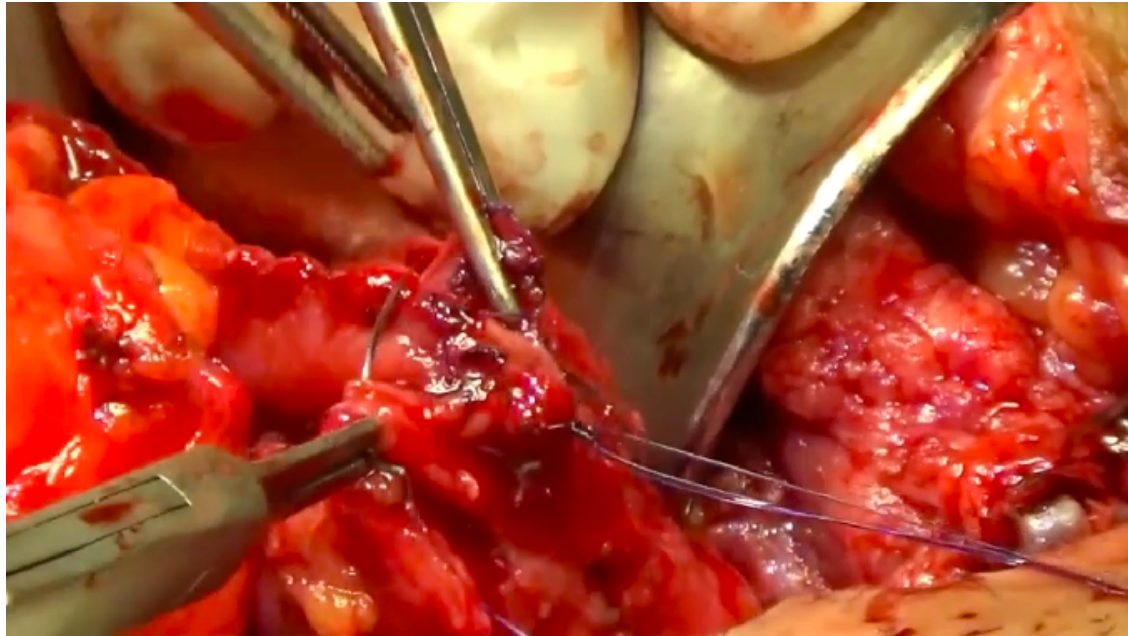


# Extravesical Conduit Reimplantation with Flap Valve Containment Mechanism

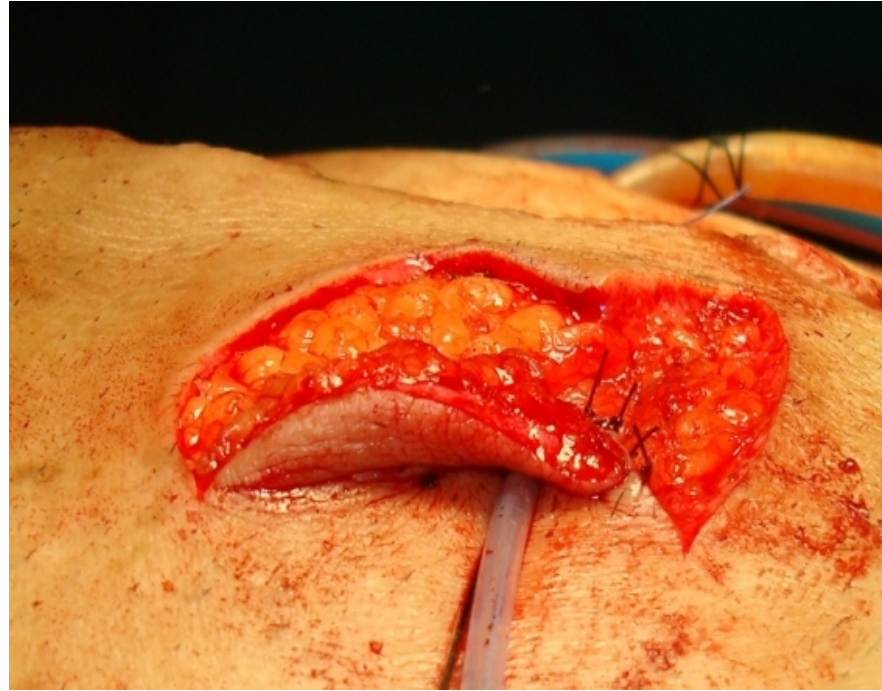




# Extravesical Conduit Reimplantation with Flap Valve Containment Mechanism



# (V-Quadrilateral-Z plasty (VQZ) and Umbilical Stoma





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# Methods

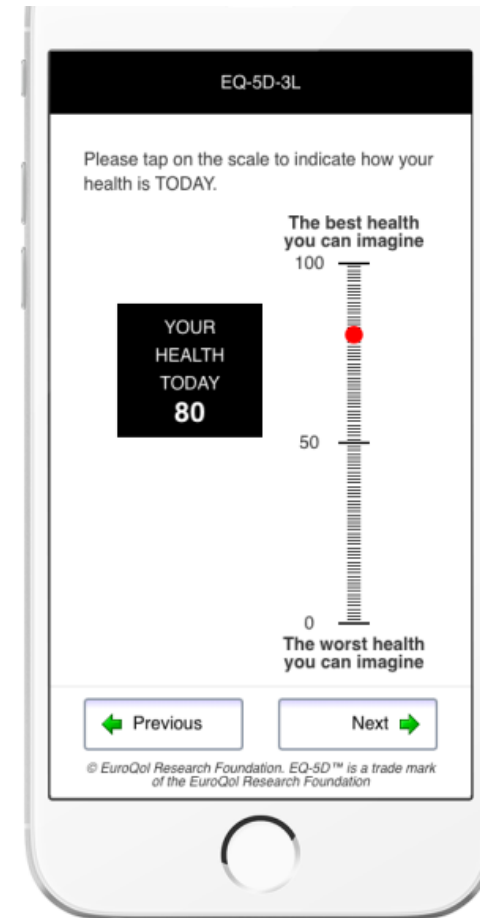
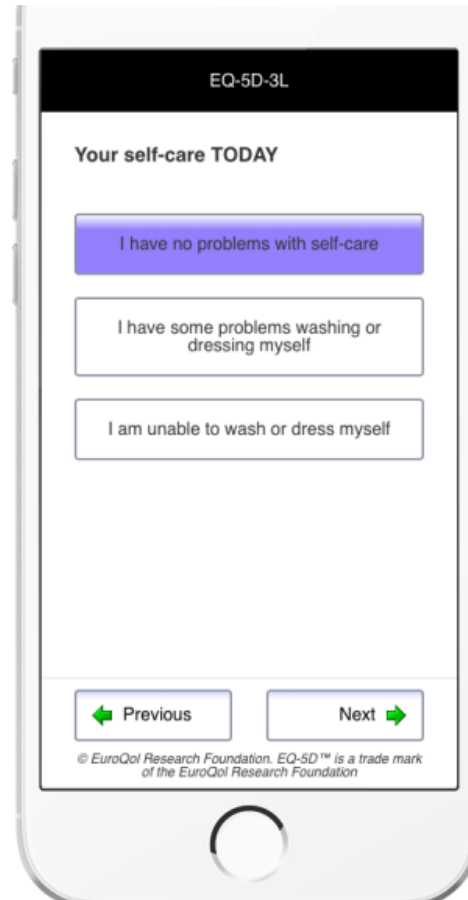
- We aim to describe HRQoL, ease of catheterization, and self-perception of global satisfaction and cosmetic outcomes.
- Records of all patients between 2012 to 2018 were reviewed. Data was collected and analysed retrospectively from medical charts. 22/25 completed the Questionnaires.
- A cross-sectional design was used to report HRQoL, ease of catheterization and self-perception.







# EQ-5D





Neurourology and Urodynamics

## Intermittent Catheterization Difficulty Questionnaire (ICDQ): A New Tool for the Evaluation of Patient Difficulties With Clean Intermittent Self-Catheterization

Amandine Guinet-Lacoste,\* Marylène Jousse, Eliane Tan, Murielle Caillebot, Frédérique Le Breton,  
and Gérard Amarenco

*Service de Neuro-Urologie et Explorations Périnéales, Hôpital Tenon, APHP,  
GREEN (Group of clinical REsearch in Neurourology, University Pierre and Marie Curie), Paris, France*







1. ¿Knowing what you already know, would you undergo a continent urinary diversion again?

2. ¿Are you satisfied with your continent urinary diversion?

3. ¿Would you recommend this type of reconstruction to a friend with your same problem?

4. ¿Are you satisfied with your body image when getting dressed?

5. ¿Are you satisfied with your Stomal appearance?



# Results

- 25 patients requiring CUD with the Mitrofanoff principle were identified. 19 men, 6 women.
- Median follow-up was 57 months, IQR (9-84)
- Complications:
  - 2 Appendiceal conduit necrosis
  - 2 Urinary incontinence
  - 3 Stomal stenosis



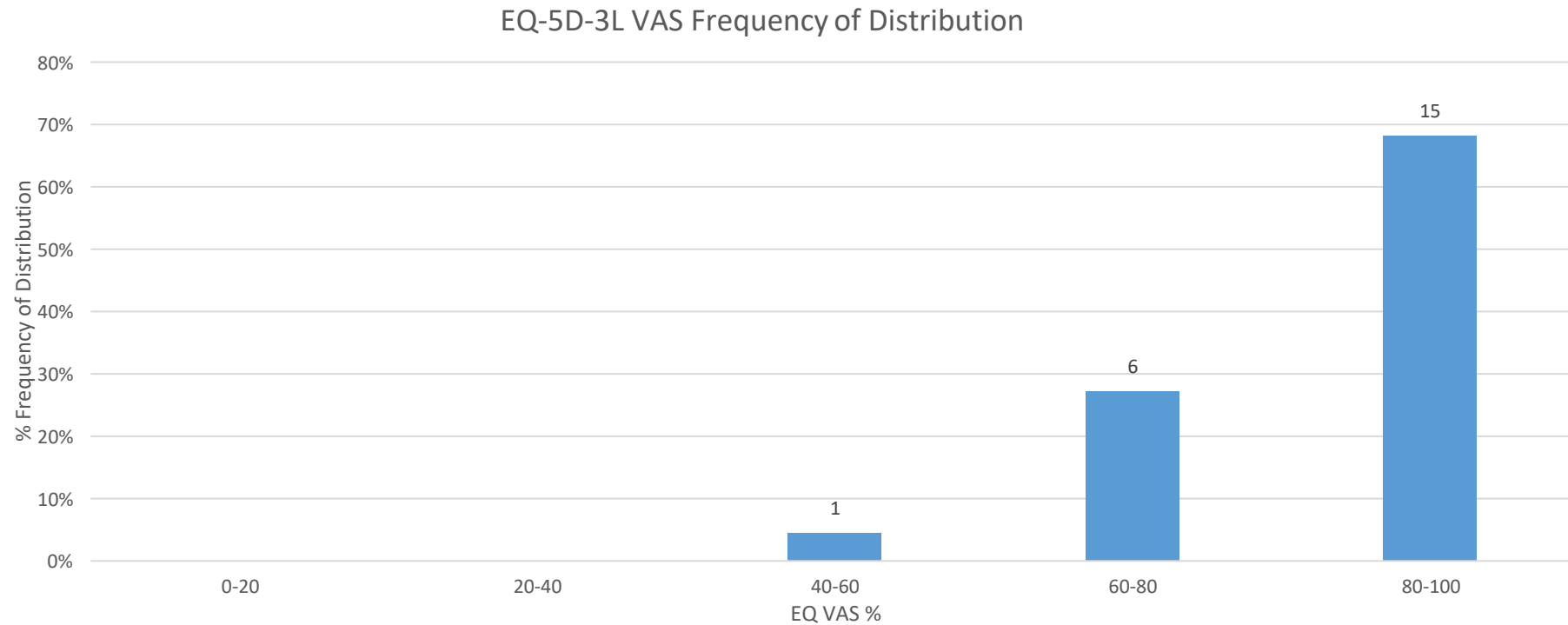


# Table 1

|   |                       |
|---|-----------------------|
| Number of patients, <i>n</i>                          | 25                    |
| Age (years)   | Median 30, IQR (5-76) |
| Male: Female Rate                                     | 2.5:1                 |
| <i>Stoma</i>  |                       |
| Flank VQZ   | 17                    |
| Umbilical   | 8                     |
| <i>Surgical Technique n (%)</i>                       |                       |
| • Appendicovesicostomy                                | 18 (72)               |
| • Ileal conduit (Yang- Monti)                         | 6 ((24)               |
| • Double Ileal Tube (Monti)                           | 1 (4)                 |
| • Casale (Spiral Monti)                               | 3 (12)                |
| •   |                       |
| <i>Primary Diagnosis and indication for CUD n (%)</i> |                       |
| • Spinal dysraphism                                   | 1 (4)                 |
| • Exstrophy-Epispadias complex                        | 2 (8)                 |
| • Cloacal abnormality                                 | 2 (8)                 |
| • Complex Urethral Stricture                          | 12 (48)               |
| • Neurogenic Bladder                                  | 6 (24)                |
| • Recto-vesical fistula                               | 1 (4)                 |
| • Other (Casamassima Syndrome)                        | 1 (4)                 |
| <i>Complications n (%)</i>                            |                       |
| Conduit Necrosis                                      | 4 (16)                |
| Incontinence  | 2 (8)                 |
| Stomal Stenosis                                       | 3 (12)                |
| Follow up (Months)                                    | Median 57, IQR (9-84) |



# EQ-5D-3L VAS





# Mitrofanoff Catheterization Difficulty Questionnaire (HUSI)- Adapted from the ICDQ

|  | 0 (Never)<br>N (%) | 1 (Infrequent)<br>N (%) | 2 (Frequent)<br>N (%) | 3 (Always)<br>N (%) | Total<br>N |
|--|--------------------|-------------------------|-----------------------|---------------------|------------|
| 1. ¿I have pain, or the CIC is painful?  | 13 (59)            | 7 (32)                  | 1 (4.5)               | 1 (4.5)             | 22         |
| 2. ¿Does your stoma bleed with CIC?  | 13 (59)            | 9 (41)                  | 0 (0)                 | 0 (0)               | 22         |
| 3. ¿I have residual pain after the catheterization?                                      | 18 (82)            | 4 (18)                  | 0 (0)                 | 0 (0)               | 22         |
| 4. ¿I experience a blocking sensation and some force is required to insert the catheter? | 10 (45.4)          | 9 (41)                  | 3 (13.6)              | 0 (0)               | 22         |
| 5. ¿I have a blocking sensation during catheter withdrawal?                              | 18 (82)            | ← 3 (13.6)              | 1 (4.5)               | 0 (0)               | 22         |



# Global Satisfaction and Cosmetic Outcomes Questionnaire (HUSI)

|   | Yes<br>N (%) | No<br>N (%) | Total<br>N (%) |
|---|--------------|-------------|----------------|
| 1. ¿Knowing what you already know, would you undergo a continent urinary diversion again? | 16 (73)      | 6 (27)      | 22 (100)       |
| 2. ¿Are you satisfied with your continent urinary diversion?                              | 20 (91)      | 2 (9)       | 22 (100)       |
| 3. ¿Would you recommend this type of reconstruction to a friend with your same problem?   | 21 (95)      | 1 (5)       | 22 (100)       |
| 4. ¿Are you satisfied with your body image when getting dressed?                          | 17 (77)      | 5 (23)      | 22 (100)       |
| 5. ¿Are you satisfied with your Stomal appearance? →                                      | 14 (64)      | 8 (36)      | 22 (100)       |





# Results

- A subgroup analysis between Umbilical vs. VQZ plasty stoma was conducted.
- **Mean EQ-VAS-score** of  $94 \pm 6.48$  compared to  $83.6 \pm 14$
- Difficulty with catheterization was ***similar in both groups***
- Satisfaction rates with the appearance of the stoma was ***lower in the umbilical stoma***
- Patients were more likely to had an ***umbilical stoma*** when they were ***younger***
- ***Stomal stenosis or incontinence were not associated with the umbilical stoma***



# Conclusion

- Continent urinary diversion with the Mitrofanoff principle is associated with:
  1. Good HRQoL (median VAS EQ-5D-3L 86.5%)
  2. Ease of catheterization (Reassure the patient about the antireflux mechanism)
  3. Adequate Self-perception of global and cosmetic outcomes (Discuss Stomal technique and location)
- Safe option with a low complication rate and need of reintervention.





**Thanks!**

