

“No significant differences were seen in urethral injury, hematuria, or difficulty passing the catheter.”

DeFoor et al., 2017

Study Hypothesis

Comparison of hydrophilic catheters to standard uncoated catheters in children with neurogenic bladder

Study Type and Methods

Prospective, randomized clinical trial

Patient Population

78 Spina Bifida patients with neurogenic bladder, ages 2-17, followed for 1 year

Catheters compared

Hydrophilic coated: LoFric™* (n=37); Uncoated: standard catheter (non-specific; single-use, n=41)

Outcomes Measured

1. Number of UTIs
2. Difficulty passing the catheter
3. Urethral injury
4. Satisfaction

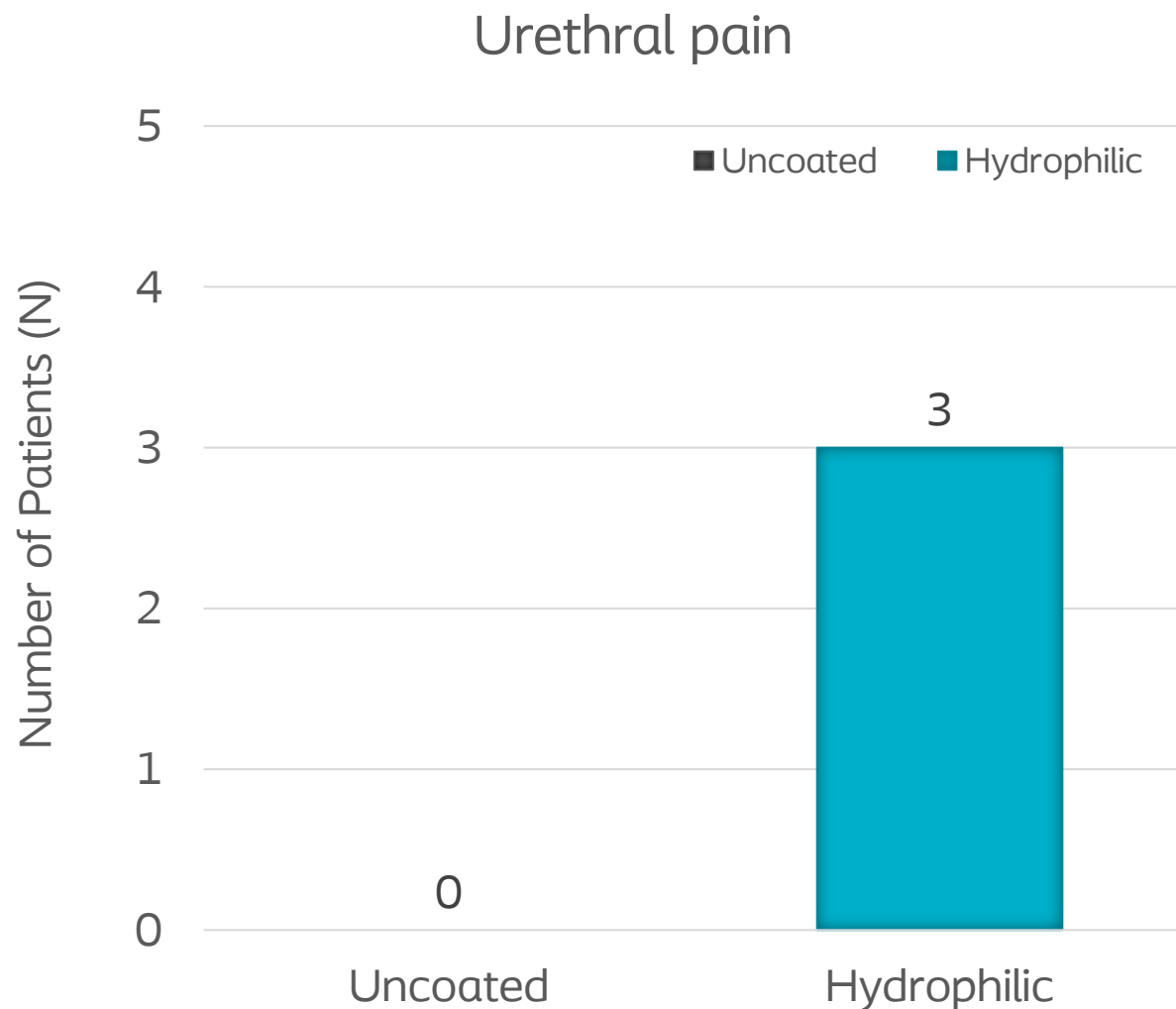
Strengths

- Randomized study design
- Balanced mix of male and female patients
- Long follow up period

Limitations

- Small sample size
- Subject attrition
- Control catheter was not standardized
- Did not use a validated quality of life measure

12% of patients in the hydrophilic group reported urethral pain; whereas no pain was reported while using their normal catheters

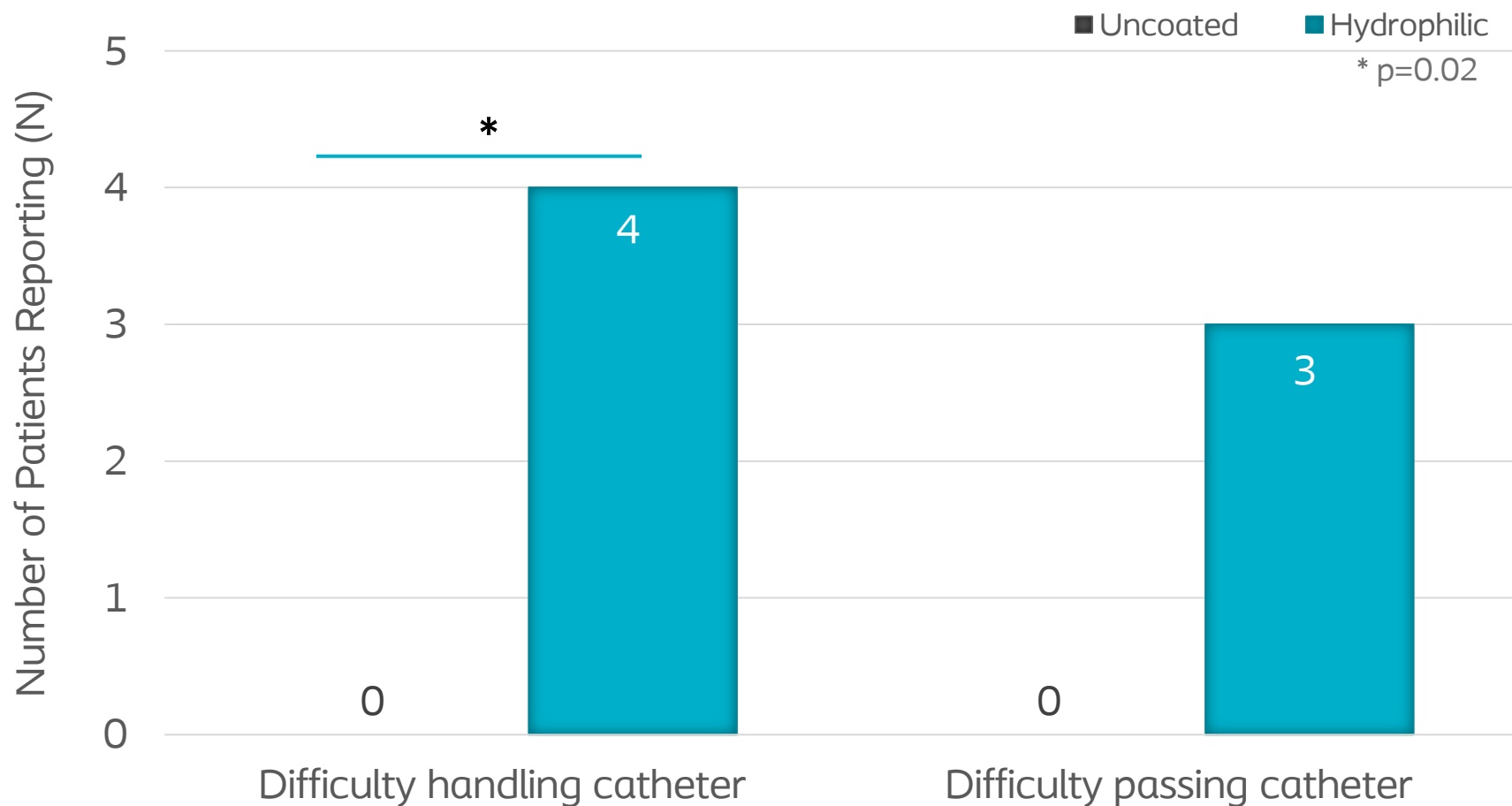


At the end of the study, patients in the hydrophilic group reported a 1.3 numerical rating score decrease in discomfort with the catheterization from baseline. (0-10 scale; 0=no pain to 10=maximal discomfort)

No hematuria or urethral injuries were reported during this study.

Of the hydrophilic group, 4 patients reported difficulty handling the catheter, significantly more than the uncoated group

Quality of Life Measures



There was no reported difference in the difficulty passing the catheter between groups

Conclusions:

- Although there were initial reports of urethral pain, no major complications (hematuria or injuries) were seen with either catheter type
- Patients reported that hydrophilic catheters were difficult to handle, that could have led to initial urethral pain.