



EXPLORE

PATIENT PREFERENCE & ADHERENCE - A KEY ROLE IN A SUCCESSFUL CATHETERIZATION TREATMENT

Patient adherence plays a key role in a successful and cost-effective catheterization treatment. A patient who feels part of the decision-making, in control of his options and how they work with his lifestyle is more inclined to stick with his therapy and subsequently experience a good clinical outcome.

Patient adherence is a key factor for ensuring good clinical outcome.¹ For this reason, non-compliance is related to a significant financial burden to the healthcare system and society with an estimated cost of about \$100 billion each year in the US, affecting 30-50% of all patients, irrespective of diagnosis or setting.¹ Several factors affect adherence and shared decision-making between doctor and patient has been recommended as a way to improve initial embracement to a treatment or a therapy.¹ Long-term adherence is dependent on whether the therapy fits into everyday life for the patient, and emphasis should be on finding treatment options that work well with life style and are easy to use.²

For intermittent catheterization therapy, adherence is partly reached by a free and adapted choice of catheter as described in several publications.^{3 4 5 6 7 8 9 10} The greatest barriers for practicing intermittent catheterization are reported to be inconvenience related to preparations¹¹ and access to bathrooms.^{12 7 14} Under such circumstances use of a convenient and neat catheter may improve adherence.¹⁵ It is however essential to fully understand patients' catheter preferences to optimize compliance. Previous research has concluded that UTI risk reduction, ease of insertion and convenience are the most appreciated attributes for intermittent catheters among patients.^{16 17} There is also a general clinical recommendation to consider personal preference, comfort and ease of use in a patient's catheter choice.^{18 19} Ease of use, comfort, and preference related to hydrophilic catheters have been documented by several authors.^{13 4 20 21 14} When a catheter choice is available, about 70-81% patients prefer hydrophilic catheters^{13 22 23} and 71% of patients prefer not to reuse non-coated plastic catheters.²⁴

Patient preference is the cornerstone of the LoFric-assortment of hydrophilic catheters with extensive research as a driver in product development.

LoFric documentation: Patient preference and Cost-effectiveness

- **User perception of a new hydrophilic-coated male urinary catheter for intermittent use.**²⁵

Observational survey including patients' preferences and opinions from 365 users evaluating LoFric Origo for 8 weeks.

The results show that LoFric Origo fulfils patient-preferred catheter requirements associated to infection prevention, ease of insertion, and convenience. For example,

1. 85% perceived the catheter as hygienic due to the insertion grip and 81% found the insertion grip easy to use.
2. 83% found it to be easy to use during insertion.
3. 67% deemed the foldable feature as important.
4. 89% found the slim catheter design appealing.

In total, this resulted in good adherence and 85% would recommend LoFric Origo to a friend.

- **Clean intermittent self-catheterisation: working with patients.**²⁶
Expert statement describing important aspects of teaching intermittent catheterization. LoFric Origo and LoFric Sense are mentioned as catheters that may help patients practicing the technique correctly.
- **Improving quality of life for men using intermittent self-catheterisation.**²⁷
Expert statement describing the advantages of intermittent catheterization with LoFric and other hydrophilic catheter. For example, LoFric (and other hydrophilic catheters) can promote independence and improve quality of life.
- **Clean Intermittent Catheterization Following Urethral Stricture Surgery Using a Low Friction Catheter Versus Conventional Plastic Catheter: A Prospective, Randomized Trial.**²⁸
2 year follow-up on 31 LoFric users and 28 users of non-coated plastic catheters investigating prevention and/or treatment of recurrent strictures after endoscopic urethrotomy.

This randomized controlled study compared the use of LoFric or non-coated catheters for intermittent catheterization treatment of strictures after endoscopic urethrotomy. The study included 62 men, 41 treated for their first stricture and 21 with recurrent problems. All patients had an indwelling catheter placed after surgery and were taught intermittent catheterization 2 weeks later. The patients were followed for 2 years and each patient evaluated their catheter use with a questionnaire. Three patients from the control group failed to follow-up. There were no differences detected between the catheters with regard to convenience or in how troublesome the catheterization was. However, patients found the LoFric catheter to generate less pain (22.6% vs. 64.5% of patients), higher comfort, and better general satisfaction (71% versus 32.2%). The study concluded that the LoFric catheter decreases pain, and increases comfort and satisfaction compared to a

non-coated catheter. For this reason, LoFric should be considered as a better option for prevention of urethral strictures from a quality of life aspect.

	LoFric (n=31)	Non-coated catheter (n=28)
Troublesome catheterization	3.46 (1.68)	5.38 (1.36)
Convenience	4.96 (1.20)	5.82 (1.50)
Pain	2.15 (1.18)	7.78 (1.92)**
Comfort	2.07 (1.12)	5.89 (1.95)**
General satisfaction	1.85 (0.55)	7.05 (1.41)**
Complications		
- Prostatitis	0	1
- Bleeding	0	2
- Bacteriuria	1	4
- Stricture recurrence	2	7

* 0= most favorable, 5 = indifferent, 10 = unfavorable ** p-value <0.05

Table based on results reported in Sallami et al. 2010²⁸

- **Patient experience with hydrophilic catheters used in clean intermittent catheterization.**²⁹
Evaluation of 100 hydrophilic catheter users showing good insertion and removal properties (85-90%) for LoFric.
- **A novel product for intermittent catheterisation: its impact on compliance with daily life – international multicentre study.**³⁰
2-weeks study of 378 LoFric-users reporting high satisfaction rates. For example, LoFric was shown to improve patients' ability to comply with everyday life and 74% of patients previously using non-coated catheters wished to continue with LoFric.
- **Patient-perceived discomfort with two coated urinary catheters.**³¹
Prospective study of 196 hydrophilic catheter users reporting low levels of discomfort with LoFric.
- **Coated catheters for intermittent catheterization: smooth or sticky?**³²
Evaluation of 61 hydrophilic catheter users presenting examples of minimized discomfort with LoFric.

"83 % with previous withdrawal discomfort had it disappear with LoFric."²³

"86 % found LoFric easy or very easy to learn and use."²³

- **[Comparative study of the degree of patient satisfaction in intermittent catheterization with Lofric and polyvinyl chloride catheters].²³**

2-months study of 35 LoFric users demonstrating evidence of higher satisfaction among LoFric-users compared to patients using non-coated catheters. For example, 83% of those who experienced withdrawal discomfort reported that this disappeared with LoFric and 86% found LoFric easy or very easy to learn and use.

This prospective study involved 40 spina bifida patients who tried out LoFric for a 2-month period and reported satisfaction using a questionnaire. Patients represented both sexes and had previous experience of performing intermittent catheterization with a non-coated catheter. A total of 86% found LoFric easy to learn. Of the 51% who reported problems with their previous catheter, 72% found these to be resolved by LoFric use. The LoFric catheter was favored by 70% for its ability to reduce discomfort compared to the non-coated catheter. The study concluded that LoFric provided an increase in both comfort and patient satisfaction.*

- **Evaluation of two coated catheters in intermittent self-catheterization.³³**

Cross-over study with 25 users testing LoFric and SpeediCath catheters for 1 week each. The results showed examples of good insertion and removal properties with LoFric. Approximately 90% of LoFric users found the catheter comfortable to insert and easy to remove.

- **[Comparison of 3 self lubricated urethral catheters: prospective study on 27 patients].³⁴**

Prospective, randomized study in 27 users who evaluated LoFric and 2 other hydrophilic catheters. The results showed high satisfaction for LoFric with regard to catheter management, insertion/withdrawal properties and performance.

- **The LoFric catheter: new technology improves an old technique.³⁵**

Review of the overall benefits of using LoFric instead of non-coated catheters for intermittent catheterization.

- **A comparison of prelubricated hydrophilic and non-hydrophilic polyvinyl chloride catheters for urethral catheterization.³⁶**

Cross-over study with 32 users who tested LoFric and a non-coated catheter for 3 weeks each. The results showed a trend toward easier management and preferences for the LoFric catheter.

"The LoFric catheter was associated with less microscopic hematuria...³⁷"

"...13 of the 16 LoFric users (81%) desired to continue its use...³⁷"

- **Clean intermittent catheterization in boys using the LoFric catheter.³⁷**

2-months study of 16 LoFric users and 14 users of non-coated catheters showing evidence of less hematuria with LoFric. The study reports that the LoFric group scored higher convenience and insertion comfort than the control group and that 82% wished to continue with LoFric.

"...81 % found the disposable catheter [LoFric] to be more convenient and 88 % thought it was easier to handle.²²"

"...if given a choice most patients will prefer to use the pre-lubricated catheter [LoFric]...²²"

- **Patient satisfaction and the LoFric catheter for clean intermittent catheterization.²²**

1-month study of 41 LoFric-users showing evidence of high satisfaction. For example, 81% preferred LoFric and found it more convenient and favorable than their previous non-coated catheter and 88% found it easier to handle.

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