Advanced IC
Hydrophilic-coated IC

Intermittent catheterisation (IC) is a considerable commitment for the user. A 5-times daily regimen amounts to 1825 catheterisations yearly.*

Using single-use hydrophilic coated intermittent catheters with low treatment burden may support long-term adherence.[1] Hydrophilic coated catheters reduce urethral discomfort, such as pain during catheterisation compared with uncoated catheters.[2] This could be an important factor in helping patients maintain adherence to an IC routine.

The World Health Organisation states that adherence to long-term therapies is a challenge for 50% of patients with chronic conditions[3]

50% of spinal cord injury (SCI) patients dropped out of IC use in the first 5 years in a retrospective, multi-center study[4]

*Calculation based on EAUN Guidelines recommending an adult patient should catheterise 4-6 times a day. If an adult catheterises 5 times a day for 365 days, it will be approx. 1,825 catheterisations per year.

Different types of single-use catheters

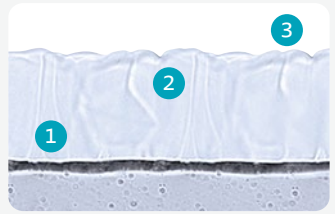
While seeking an IC solution for your patients, you may have come across different types of single-use catheters. There are two main types available: Conventional IC and Advanced IC.

Conventional IC
These catheters are uncoated catheters and are available as single use and re-use.

Advanced IC
These catheters have a hydrophilic coating bound to the catheter that is designed to reduce the risk of trauma to the urethra compared with uncoated catheters. Some of them are instantly ready to go while others may require activation by the addition of water by the user. These catheters are for single use.

What is a hydrophilic coating?

Single-use hydrophilic-coated catheters are coated with a lubricating layer of polymer that absorbs water, resulting in a smooth homogeneous surface.



1. Base coating
The base coating consists of tightly bound PVP molecules. These ensure the coating remains uniform and evenly distributed during insertion and withdrawal, and prevents the top coat from rubbing off.

2. Top coating
The top coating consists of more loosely bound PVP molecules that provide the optimal level of water absorption, making the surface extremely smooth and minimising friction.

3. Wetting agent
Some Advanced IC catheters contain a wetting agent, ensuring the coating is always hydrated optimally, making them instantly ready to use.

"I would advise other users to use a catheter that has low friction force, with good lubrication."

Ildefonso | IC user

All SpeediCath® catheters offer hydrophilic-coated intermittent catheterisation (HCIC).

The Friction test
SpeediCath catheters came out significantly smoother than the other hydrophilic coated and lubricated catheters in the test when measured immediately after opening.

Coloplast

Why HCIC catheters are a good choice

HCIC has reduced friction force

The polymer coating on a hydrophilic-coated catheter absorbs and binds water, which results in a smooth homogenous surface. Consequently, the friction force on withdrawing a hydrophilic-coated catheter can be reduced.[2]

"It always glides smoothly, and you don't need extra lubrication"

Peter | IC user

"Friction of a catheter is one of the biggest issues"

Akio | Urologist

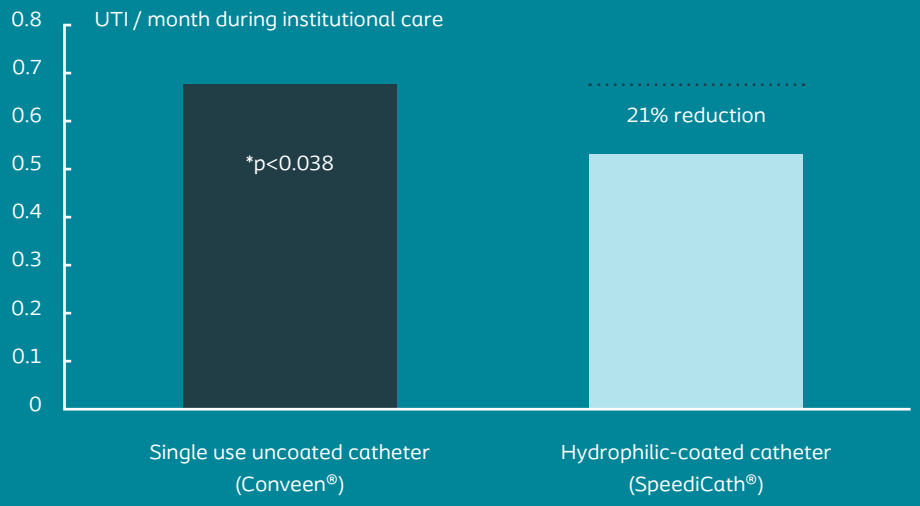
HCIC has a lower risk of UTIs

Urinary tract infections (UTIs) are a common complication of bladder dysfunction with chronic urinary retention.[5] Hydrophilic-coated catheters significantly reduce the risk of UTI compared with sterile single-use uncoated catheters.

In a randomised controlled trial, the incidence of antibiotic-treated symptomatic UTIs during institutional care was reduced by 21% (p=0.038) in the hydrophilic-coated catheter group compared with the uncoated catheter group (Figure 1).[6]

Figure 1

The incidence of antibiotic-treated symptomatic UTIs was significantly reduced in the hydrophilic-coated catheter group compared with the uncoated catheter group.[6]



HCIC reduces the risk of micro-trauma and urethral stricture

Hydrophilic-coated catheters are associated with less urethral microtrauma than uncoated catheters,[2,6-9] preventing narrowing of the urethra and strictures, which are complications commonly observed with uncoated catheters.[10,11]

A recent prospective, randomised, blinded, crossover study found a significant reduction in likelihood of getting urethral trauma when using HCIC over non-HCIC catheters.[12] Further, a meta-analysis in 2022 found that the use of HCIC catheters in patients with bladder dysfunction had a significantly lower risk of micro-haematuria[13,14] and urethral stricture.[14]

IC increases patient satisfaction and QoL

Evidence supports the benefits of hydrophilic-coated catheters in terms of patient satisfaction and quality of life (QoL).
A systematic review found that 7 out of 9 studies reported a significant improvement in satisfaction and preference for HCIC over uncoated catheters.[13]

Another systematic review concluded that evidence in general supports hydrophilic catheters over non-hydrophilic in terms of higher satisfaction, preference, cost-effectiveness and QoL.[18]

HCIC reduces urethral discomfort

HCIC catheters were developed with the aim of reducing the catheter-associated adverse events commonly seen with conventional IC catheters, such as urethral trauma, narrowed urethra and strictures, false passages, and genital infections.[5,10,15]

The EAUN Guidelines from 2013 concluded that HClC reduced pain, and most patients preferred using HClC for improved comfort. Additionally, several trials concluded that HCIC significantly reduced discomfort when compared with uncoated catheters.[2,16]

Stensballe, et al. found that HCIC only caused discomfort in 30% of the users compared with 55% in the uncoated catheter group, while testing on healthy male subjects with full sensation.[2]

In a study by Leriche et al., 7 out of 29 patients using gel-coated catheters reported pain or discomfort compared with only 1 out of 29 using HCIC (p=0.057).[17]

HCIC is a cost-effective solution

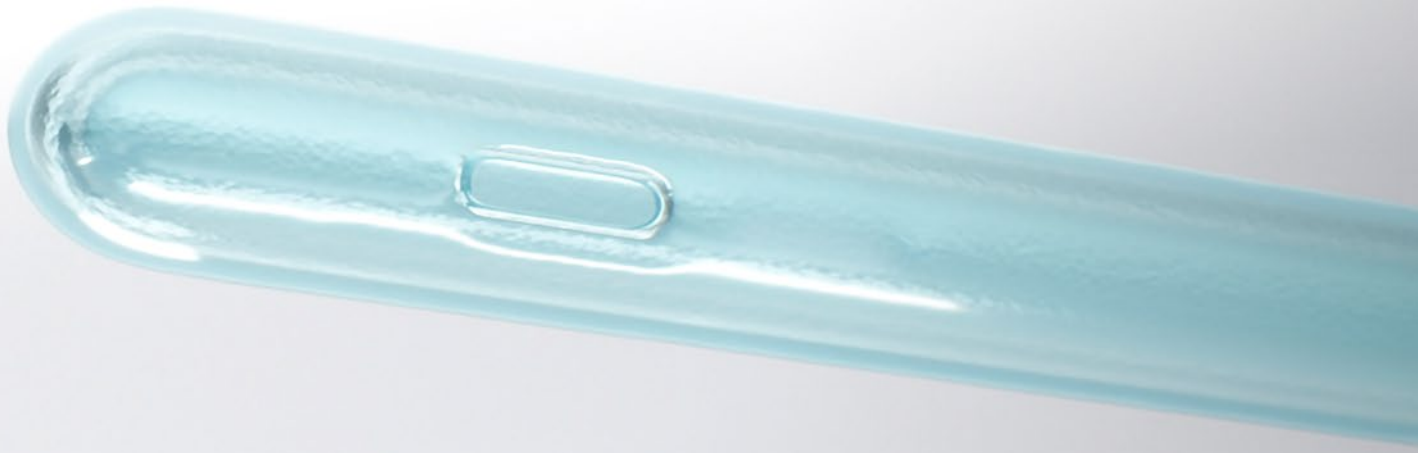
Considering IC is recommended 4-6 times daily in people with chronic urinary retention,[12,19] the cost of using catheters is a burden that needs to be considered.

A recent systematic review concluded that evidence supports hydrophilic catheters over non-hydrophilic in terms of cost-effectiveness.[18]

And in a UK-modelled population, HCIC catheters were found to be cost-effective when compared with single-use uncoated intermittent catheters.[20]

5 in 6

In a meta-analysis conducted in 2020, 5 out of 6 studies concluded that coated catheters are most cost-effective when compared with non-HCIC catheters.[12]



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