"...hydrophilic catheter usage was associated with reduced numbers of treated UTIs as compare with standard non-hydrophilic catheters in persons with spinal cord injury who used self-IC..."

Cardenas et al., 2009

Cardenas DD, Hoffman JM. Hydrophilic catheters versus noncoated catheters for reducing the incidence of urinary tract infections: a randomized controlled trial. Arch Phys Med Rehabil. 2009;90(10):1668-1671.

#### **Study Hypothesis**

Hydrophilic coated catheters reduce the incidence of symptomatic UTIs in SCI patients on intermittent catheterization

### Study Type and Methods

Randomized, controlled trial, followed for 1 year

#### **Patient Population**

56 SCI patients with recurrent UTIs (2+) in the last year who were hydrophilic naïve

#### **Catheters compared**

Hydrophilic coated: LoFric<sup>™</sup>\* (n=28). Uncoated: usual catheter with clean technique (n=26)

**Outcomes Measured** 

Symptomatic UTI

#### Strengths

- Randomized study design
- Self catheterization instruction by experienced nurse in both groups
- Focused on variants of UTI (total number, antibiotic treated)

#### Limitations

- Small sample size
- Low number of women
- Self-reported UTI symptoms

Cardenas DD, Hoffman JM. Hydrophilic catheters versus noncoated catheters for reducing the incidence of urinary tract infections: a randomized controlled trial. Arch Phys Med Rehabil. 2009;90(10):1668-1671.

<sup>™</sup>\* Third party brands are property of their respective owners.

# Cardenas, 2009

## No difference between groups in the total number of symptomatic UTIs



Cardenas DD, Hoffman JM. Hydrophilic catheters versus noncoated catheters for reducing the incidence of urinary tract infections: a randomized controlled trial. Arch Phys Med Rehabil. 2009;90(10):1668-1671.

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### Antibiotic Treated UTIs



Mean <u>antibiotic-treated UTIs</u> were significantly reduced in patients using hydrophilic-coated catheters as compared to those using un-coated catheters; however, the total number of UTIs did not differ

Cardenas DD, Hoffman JM. Hydrophilic catheters versus noncoated catheters for reducing the incidence of urinary tract infections: a randomized controlled trial. Arch Phys Med Rehabil. 2009;90(10):1668-1671.

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# **Conclusions:**

- The number of symptomatic UTIs was the less in the hydrophilic group; however not statistically different than the uncoated catheter group
- The mean number of UTIs treated with antibiotics was significantly smaller in the hydrophilic group

Cardenas DD, Hoffman JM. Hydrophilic catheters versus noncoated catheters for reducing the incidence of urinary tract infections: a randomized controlled trial. Arch Phys Med Rehabil. 2009;90(10):1668-1671.

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