

# Intermittent Catheterisation with Hydrophilic-Coated Catheters (SpeediCath) Reduces the Risk of Clinical Urinary Tract Infection in Spinal Cord Injured Patients: A Prospective Randomised Parallel Comparative Trial

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## Abstract

### Objectives

To compare the performance of SpeediCath hydrophilic-coated catheters versus uncoated polyvinyl chloride (PVC) catheters, in traumatic spinal cord injured patients presenting with functional neurogenic bladder-sphincter disorders.

### Methods

A 1-year, prospective, open, parallel, comparative, randomised, multi centre study included 123 male patients,  $\geq 16$  y and injured within the last 6 months. Primary endpoints were occurrence of symptomatic urinary tract infection (UTI) and hematuria. Secondary endpoints were development of urethral strictures and convenience of use. The main hypothesis was that coated catheters cause fewer complications in terms of symptomatic UTIs and hematuria.

### Results

57 out of 123 patients completed the 12-month study. Fewer patients using the SpeediCath hydrophilic-coated catheter (64%) experienced 1 or more UTIs compared to the uncoated PVC catheter group (82%) ( $p = 0.02$ ). Thus, twice as many patients in the SpeediCath group were free of UTI.

There was no significant difference in the number of patients experiencing bleeding episodes (38/55 SpeediCath; 32/59 PVC) and no overall difference in the occurrence of hematuria, leukocyturia and bacteriuria.

### **Conclusions**

The results indicate that there is a beneficial effect regarding UTI when using hydrophilic-coated catheters.