A Prospective randomized trial of the LoFric hydrophilic-coated catheter versus conventional plastic catheter for clean intermittent catheterization.

Author: Jonathan M. Vapnek, Frederick M. Maynard, Jiensup Kim. Institution: Departments of Urology and Rehabilitation Medicine, Mt. Sinai School of Medicine, MetroHealth Medical Center, Loma Linda University Medical Center and Department of Clinical Research, Astra Tech AB. Presented: The Journal of Urology 2003;169: 994-998.

Objective: The objectives of this one-year study were to compare the incidence of urinary tract infections, as well as the degree of pyuria, hematuria, experienced by patients using the LoFric catheter vs. patients using conventional plastic catheters.

No of patients: 62 male. Methods: Forty-nine adult male patients who had all previously been using conventional catheters completed the study. Follow-up with urine analysis and physical examinations was conducted every three months. Result: While the incidence of urinary tract infections was not significantly different between the two groups at either the beginning or end of the study, the group of patients using the LoFric catheter experienced a statistically significant decrease in UTIs during the study period. At the outset of the study, the group randomized to LoFric had a UTI incidence of .45 per patient per month. By the end of the study, UTI incidence in this group was .13 UTIs per month. The group using conventional catheters did not see a significant decrease in infection incidence. Furthermore, the group of patients using the LoFric catheter experienced a significantly lower rate of hematuria throughout the study period than the group using conventional plastic catheters. Conclusions: Patients using the hydrophilic coated catheter have a significant decrease in the degree of microhematuria as well as a significant decrease in the rate of urinary tract infections compared with those using standard plastic catheters. Patients who experience difficulty with CIC and those who with a high rate of UTI may benefit from using the hydrophilic-coated catheter on a regular basis.