

THE EFFECT OF OPTIMUM BLADDER MANAGEMENT ON THE PREVALENCE OF URINARY TRACT INFECTIONS IN SPINAL CORD INJURY PATIENTS

Hypothesis / aims of study

Correct long term bladder management is key in reducing the rate of urinary tract infection (UTI) in spinal cord injuries (SCI) patients. The aim of this study was to determine which method of bladder drainage was associated with the lowest incidence of UTI.

Study design, materials and methods

Data was collected on new 143 SCI patients admitted to the Victorian Spinal Cord Service. Data included, patient characteristics, injury data, bladder management and diagnosis of UTI. IDC were the initial bladder management, when possible patients were converted to intermittent catheterisation (IC) or suprapubic catheter (SPC).

Results

58 (40%) of patients developed 1 or more UTI. 51 (49%) of male patients developed a UTI, whereas 7 (18%) of female patients developed a UTI. The change in incidence rate of UTI for IDC vs. long-term bladder management (IC and SPC) was 1.61 to 0.76 per 100 person-days. Removing the IDC resulted in a significant reduction in symptomatic UTIs when compared with all other bladder management. ($p=0.001$). The change in incidence rate of UTIs for IDC vs. IC was 1.65 to 0.83 per 100 person-days. IC resulted in a significant drop in symptomatic UTIs diagnosed. ($p=0.018$). The change in incidence rate of UTIs for IDC vs. SPC was 1.42 to 0.52 per 100 person-days. Changing from an IDC to an SPC also resulted in a significant reduction in symptomatic UTIs. ($p=0.004$).

Interpretation of results

This study highlights the importance of removing IDC and switching alternative long-term bladder management in SCI patients. Both IC and SPC significantly reduced the number of symptomatic urinary tract infections diagnosed.

Concluding message

Long term IDC are associated with the higher rates of UTI in SCI patients than IC or SPC.

Disclosures

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