

**Poster 384****The Effect of Electro-Acupuncture on Urinary Retention After Spinal Cord Injury.**

Zhen Chen, MD, PhD (Xuanwu Hospital of Capital Medical University, Beijing, China); Maobin Wang, MD; Shenghan Wang.

**Disclosures:** Z. Chen, None.

**Objective:** To assess the clinical efficacy of electro-acupuncture at sacral nerve root in patients with urinary retention caused by spinal cord injury.

**Design:** Controlled study.

**Participants:** Twenty subjects with urinary retention lasting for more than 2 months after spinal cord injury were equally assigned to the treatment group and control group (n=10).

**Interventions:** The control group was treated with conventional catheterization. The treatment group received conventional catheterization and the electro-acupuncture at bilateral sacral nerve root. The stimulation lasted for 30 minutes, once a day, and 5 times per week. The sessions lasted for 1 to 3 months. Six months follow-up.

**Main Outcome Measures:** Voiding diaries, quality of life (QOL) score, and urodynamic examination.

**Results:** 7 patients could micturate on self-determination in treatment group. It was only 2 in control group. In treatment group, the average QOL score declined by 2.2 points ( $P=.063$ ), the maximum detrusor pressure increased from  $9.51\pm 4.36$  cm H<sub>2</sub>O to  $31.32\pm 6.36$  cm H<sub>2</sub>O ( $P<.01$ ), and the average residual volume decreased from  $300.21\pm 47.36$  mL to  $66.63\pm 27.36$  mL ( $P<.01$ ). There were significant differences in urodynamics and QOL scores between the treatment group and control group.

**Conclusions:** Electro-acupuncture at bilateral sacral nerve root serves as an effective, economical, and safe method for patients with urinary retention after spinal cord injury.

**Poster 385****The Management of Patients With Chronic Spinal Cord Injury in Emergency Departments: A Knowledge Survey of Emergency Medicine Residents.**

Lisa DiPonio, MD (University of Michigan, Ann Arbor, MI); James Carson; Catherine Curtin, MD; Kirsten Engel; David R. Gater, MD, PhD; Terry Kowalenko, MD; Randy S. Roth, PhD.

**Disclosures:** L. DiPonio, None.

**Objective:** To determine the extent to which emergency medicine (EM) residents are familiar with critical care guidelines for the management of patients with chronic spinal cord injury (SCI), whether degree of EM training is associated with greater awareness of management, and the frequency of medical encounters with SCI patients.

**Design:** Descriptive 16-item multiple choice survey de-

scribing a wide range of clinical vignettes of SCI patients seen typically in emergency or urgent care settings for common or critical SCI-related medical symptoms and resident estimate of frequency of contact with SCI patients.

**Setting:** ED residency programs in Michigan.

**Participants:** First, second, and third year ED residents; 58% response rate.

**Main Outcome Measures:** Percentage of item accuracy for the 16 vignettes tabulated by residency year and estimate of frequency of contact with SCI patients in ED per month.

**Results:** 60% of ED residents saw an average of 1-4 SCI patients monthly. EM residents demonstrated variable accuracy of responses to the clinical vignettes. Overall, a mean of 47% of the vignettes were correctly managed, with the percentage of correct answers ranging from 2% (in SCI pulmonary physiology) to 91% (identification of posttraumatic syring). In general, EM residents demonstrated an adequate knowledge base for some important aspects of SCI medical care, but several areas of inquiry (eg, silent cardiac ischemia and urinary tract infection, interventions for pulmonary problems and autonomic dysreflexia, IVC filter safety during assisted cough) revealed significant limitations and deficits. Surprisingly, there was limited evidence for the benefit of length of EM training on awareness of appropriate SCI medical management for the clinical problems examined.

**Conclusions:** The findings suggest that patients with longstanding SCI commonly use EM services, and that EM residents demonstrate considerable variability in diagnostic and treatment acumen across medical problems common to persons with SCI. Duration of training did not appear to enhance ED resident knowledge for SCI medical management strategies. This study highlights areas of SCI medical management that deserve renewed attention in training resident physicians in EM.

**Poster 386****The Use of *Lactobacillus* in the Prevention of *Clostridium Difficile*-associated Diarrhea in Spinal Cord Injury Inpatients.**

Dan Cushman, MD (University of Miami Miller School of Medicine, Miami, FL); Suzanne Duncan, MD; Robert W. Irwin, MD.

**Disclosures:** D. Cushman, None.

**Objective:** To assess the efficacy of *Lactobacillus* in the prevention of *Clostridium difficile*-associated diarrhea (CDAD) in spinal cord injury inpatients admitted to an acute rehabilitation unit.

**Design:** Retrospective cohort of patients with spinal cord injury.

**Setting:** Inpatient spinal cord injury unit in a large, tertiary care rehabilitation hospital.

**Participants:** 873 adult inpatients with spinal cord injury between November 1, 2003 and May 10, 2006.

**Interventions:** Patients received a commercial preparation