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P161-e
Pathogens of urinary system infection in patients with spinal cord disorders: Their distribution and treatment
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Keywords: Spinal cord disorders; Infection; Pathogen; Drug-resistant spectrum

Introduction.– To study the distribution and drug-resistance of the pathogens of urinary system infection in patients with spinal cord disorders.

Methods.– Retrospective surveys of urinary system infection in 168 cases with spinal cord disorders were carried out in our hospital from Jan 2006 to Oct 2009. The pathogen analysis and the drug sensitivity test were done for these cases.

Results.– The total 221 strains of pathogen were identified from the patients’ urine specimens. The main pathogens were Gram-negative bacteria (73.76%). Among them, Escherichia coli were the highest (40.27%). The second one was Gram-positive, Es (19.00%). Among them, the Staphylococcus aureus was the highest (9.05%). Drug-resistant strains had increased.

Conclusions.– The main pathogens are Enterobacteriacea which infect the urinary system in spinal cord disorders patients. The antibiotics should be used reasonably according to the test results of the pathogens sensitivity to drugs, which can reduce the development of drug-resistant strains.

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Erection and ejaculation in patients with traumatic spinal cord injury
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Keywords: Spinal cord injury; Erection; Ejaculation

Introduction.– Erection and ejaculation are often impaired after spinal cord injury (SCI).

Material and methods.– Seventy-five traumatic SCI male patients were included in this study. Patients’ erection and ejaculation status were noted from their medical report.

Results.– Despite majority of the patients (81.3%) had erection function, only 20 of the patients (26.7%) said they got good enough erection. Sixty percent of participants’ erection duration were shorter than 5 minutes. There were statistically significant differences between three categories in terms of erection types (P<0.001). Among SCI patients, 94.5% with a lesion above T10 had reflex erection (RE), 83.3% with conus and cauda had psychogenic erection, 37.3% reported being able to achieve ejaculation. Relationship between presence of ejaculation and erection type was statistically significant (P<0.05), 46.4% of patients who maintained ejaculation got mixed type of erection, while 48.9% of patients who were unable to ejaculate had only RE.

Discussion.– Our results show that only presence of erection is not enough also ejaculation and erection type was statistically significant (<0.001). Among SCI patients, 94.5% with a lesion above T10 had reflex erection (RE), 83.3% with conus and cauda had psychogenic erection, 37.3% reported being able to achieve ejaculation. Relationship between presence of ejaculation and erection type was statistically significant (P<0.05), 46.4% of patients who maintained ejaculation got mixed type of erection, while 48.9% of patients who were unable to ejaculate had only RE.

Conclusions.– The goal of this cross-sectional study was to investigate correlations of muscle and bone of lower limbs in spinal cord injured compared with able-bodied subjects.

Methods.– Thirty-one paraplegics (AIS A) were divided according to the neurological level of injury (NLoI) in group A (n = 16, high paraplegia: over thoracic (T) 7 NLoI) and group B (n = 15, low paraplegia, T8-T12) and compared with 50 controls (group C). Images were taken at 38% and 66% of the tibia’s length (cortical density and area, bone area, muscle area, bone/muscle ratio).

Results.– In controls muscle area was correlated with bone area obtained from P QCT in 66% of the tibia. Groups A and B differed significantly (P<0.001) from C according to bone and muscle area.

Conclusions.– The relationship between bone and muscle was consistent in able-bodied and predictably altered in those with spinal cord injury, a clinical disease affecting bone and muscle. This could be only partial explained by the bone steady state.

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Investigation of bone-muscle relationship with peripheral quantitative computed tomography in SCI
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Keywords: Mechanostat theory; Bone-muscle unit; pQCT; SCI

Introduction.– Two non-urodynamic classifications were used to assess the efficiency of an MFES standardized therapeutic method for micturition control in SCI patients with neurogenic bladder

Material and methods.– Comparison of Bors-Comarr (BCS) with an own classification (OCS) scale quantified scale (intrinsic and extrinsic validation) based on a related prospective study - 332 inpatients with NB at the P (neural-muscular) RM Clinic of our hospital-filled between 2006–2011; the cases were divided in two lots: IMFES (162, mean 39.63 years, st.dev. 17.06) and control (170 cases, mean 39.96 years, st.dev 17.58), stratified by AIS sensory (SS) and motor (MS) scores.

Results.– BCS/OCS intrinsic: sensibility (0.82/0.68), specificity (0.48/0.73), test efficiency (0.65/0.71) and extrinsic: Somers (0.921, 95% confidence interval [c.i. 0.909–0.933), Spearman (0.970, 95% c.i. 0.962–0.978), Cronbach (0.969, 95% c.i. 0.962–0.975), Kendall (0.921, 95% c.i. 0.909–0.933), Pearson (0.949,