Spinal Cord (2011) 49, 321
 1362-4393/11 $32.00
www.nature.com/sc

EDITOR'S PAGE

Research: the way forward

JJ Wyndaele, Editor
Antwerp University Hospital, Antwerp, Belgium
E-mail: spinalcord@uza.be

Dear *Spinal Cord* reader,

It is with regret that ISCoS announces the passing of Sandy Pinkerton (Obituary in this issue).

In the broadest sense of the word, research includes any gathering of data, information and facts for the advancement of knowledge. *Spinal Cord* with its wide international readership is a perfect forum to publish one's research, both animal and clinical. In this third 'bumper' issue there is a long list of high value research manuscripts in many different aspects of spinal cord medicine.

Weiner and Silver present an excellent piece of historical work on the contribution of the Great Windmill Street School of Anatomy in London to our understanding of the physiology, anatomy and pathology of the spine and spinal cord and its role in the treatment of spinal diseases in the 18th century.

Ueno *et al.* found that the phosphorylated form of the high molecular weight neurofilament subunit NF-H (pNF-H), a new biomarker for axonal degeneration, may serve as a biomarker for evaluating the efficacy of therapies for spinal cord injuries (SCI).

Lonjon *et al.* thoroughly explored the histological and functional outcomes of cyclosporin A treatment in a rat model of spinal cord compression. They observed dramatic deleterious effects on the kidneys, associated with modifications of the CsA blood concentration. Adding an antibiotic treatment reduced kidney alteration without modifying the CsA blood concentration. Finally they demonstrated that CsA treatment *per se* did not modify both functional recovery and lesion extension.

Reis *et al.* found a significant reduction in iron plasma levels after SCI in a limb movement animal model, and suggest that it may be one of the mechanisms involved in the pathogenesis of sleep-related movement disorders.

Marsh and Flemming demonstrated in an animal SCI model that acute treatment with Reparixin, a noncompetitive inhibitor of CXCR1 and CXCR2 chemokine receptors involved in inflammation, reduces acute inflammation and is associated with minor improvements in motor function and a significant reduction in the severity of autonomic dysreflexia.

Scholtes *et al.* found high resolution inversion recovery-supported proton density magnetic resonance imaging provides useful micro-anatomical information about white matter damage and sparing in the post-mortem assessment of chronic rat SCI.

In clinical research Savic *et al.* showed good sensitivity of the electrical perceptual threshold to change in dermatomes at and directly below the sensory level of SCI, making it a useful quantitative instrument for detecting changes in sensory function during longitudinal monitoring of patients with SCI. Zariffa *et al.* characterized neurological changes over the first year after traumatic thoracic sensorimotor complete SCI and found that a sustained deterioration of three or more thoracic sensory levels or loss of upper extremity motor function are rare events and may be useful for tracking the safety of a therapeutic intervention in early phase acute SCI clinical trials, if a significant proportion of study subjects exhibit such an ascent.

McKay *et al.* showed that recovery of voluntary motor function after SCI can be quantitatively tracked using neurophysiological methods in the domains of time and multi-muscle motor unit activation.

Samdani *et al.* found that in the pediatric population the correlation between S4-5 and anorectal sensation is lower than anticipated. This suggests that anal pressure has a lower threshold for perception of sensation compared to light touch and pin prick, or may activate an alternative neuronal pathway that is perceived by the patient. Further investigations into the validity of the sacral sparing components of the International Standards for Neurological Classification of SCI examinations are warranted.

New *et al.* in Australia and Scivoletto *et al.* in Italy made epidemiological comparisons between thousands of traumatic and non traumatic individuals with a spinal cord lesion. The differences between groups are clear.

Ploumis *et al.* again demonstrate that acute care in organized SCI trauma centers can significantly lower acute care or total lengths of stay and incidence of pressure ulcers compared to non-SCI trauma centers.

Alexandrino *et al.* found that patients with SCI have a significant reduction of seminal zinc.

Quality of life is discussed in several studies and related to different factors. And there's more interesting reading and exploring to be done in manuscripts not specifically mentioned here.

Enjoy them.

Spinal Cord (2011) **49,** 321; doi:10.1038/sc.2011.13