www.nature.com/sc

## www.mature.com



## It is safe to carry out an MRI scan on patients with SARS providing that is conducted in a 1.5 Tesla system



JJ Wyndaele Antwerp University Hospital, Antwerp, Belgium E-mail: wyndaeleji@skynet.be

Dear Spinal Cord reader,

The title of this editorial page comes from the manuscript by Lopez de Heredia and is important news for those who have patients with a SARS (Brindley Finetech) under their care.

The review by Illis explains that the long history of research in regeneration in the CNS centred on the site of the lesion has proved to be sterile. Mr Illis states that after a century of such research the focus should move away from the site of the lesion to the intact CNS where there is real promise of improvement of function.

Zhenquan Jia et al. did an extensive review of literature over several decades and identified numerous bioactive compounds that have anti-oxidative stress benefits in animal models of SCI. They stress the importance of continued studies on bioactive compounds with reactive oxygen species-scavenging capacity in the search of effective antioxidant-based modalities for treating SCI in human subjects.

Frostell *et al.* describe an interesting new technique of intercostal neurophysiology in combination with MRI optimized for imaging near metal implants, and which can be used to determine the extent of a chronic complete thoracic SCI, both anatomically and functionally.

McCarthy *et al.* found clear changes of both structure and material at three levels of the tibia in chronic SCI patients, consistent with specific adaptations to reduced local mechanical loading conditions. In order to assess fracture risk in SCI and also to monitor the effect of therapeutic interventions, the structure of the bone should be considered in addition to trabecular BMD.

Krause *et al.* further studied the predictors of mortality in spinal cord lesioned and found them to have a considerable stability. The significant predictors of mortality included injury severity, age, and years since injury. Also poverty, psychotropic prescription medication use, amputation/fracture, pressure sore surgeries, and major depression all were statistically significant.

Aidinoff and Catz present the spinal cord injury ability realization measurement index (SCI-ARMI) which represents rehabilitation potential and efficacy based on the linear relationship between the Spinal Cord Independence Measure (SCIM) and the American Spinal Injury Association (ASIA) impairment scale (AIS) motor scores (AMS). They found the new formulas to improve the accuracy of calculated ability realization for any AMS.

Nakao *et al.* found in a case control study that the more severe SCI and the lower the ASIA motor score is, the more frequently low blood pressure and/or hyponatremia are found.

Yanagawa et al. found in a retrospective study that spinal cord concussion is not rare. They stress the importance to check the neurological findings at the scene because half of the subjects in the spinal cord concussion group demonstrated immediate neurological improvement between pre-hospital and in-hospital findings, however none of the subjects in the spinal cord injury group demonstrated such improvement. Young-Hee Lee et al. found in a small sample of male SCL patients that semi-conditional electrical stimulation on dorsal penile nerve effectively suppresses neurogenic detrusor overactivity and improves bladder capacity, compliance and wall deformity.

Brurok et al. found that in SCI individuals with injury level above T6 (high) leg vascular occlusion combined with arm cycling augmented VO2peak. However, the acute increase in VO2peak was lower than when FES cycling was combined with arm cycling. These findings may have future implications for exercise prescription for SCI individuals.

There are several more interesting contributions in this issue which will be of benefit to many involved in SCL management and care.

Enjoy reading.

The Spinal Cord Prize is open till May 11 2012 for competition. Consult the web www.iscos.org.uk for conditions and to find out what the prize represents.

ISCOS reentered close collaboration with WHO. Read special announcement.