

EDITOR'S PAGE

Heterotopic ossification following spinal cord injury



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Dear *Spinal Cord* reader,

The first review in this issue looks into the established knowledge on management of heterotopic ossification (HO) following spinal cord injury. Teasell *et al.* conducted a systematic review of the effectiveness of interventions used to prevent and treat this condition. Pharmacological treatments of HO post spinal cord injury (SCI) had the highest level of research evidence supporting their use. Of these, non-steroidal anti-inflammatory drugs demonstrated greatest efficacy in prevention of HO when administered early after a SCI, while bisphosphonates were the intervention with the strongest supportive evidence once HO had developed. Of the non-pharmacological interventions, pulse low-intensity electromagnetic field was supported by the highest level of evidence. More research is needed to fully understand its role. This paper has been made freely available online for a general readership.

The second review and an original article deal with the International Classification of Functioning (ICF). Post *et al.* present a study as part of the development of an International Classification of Functioning, Disability and Health (ICF) Core Set for SCI. Starting from more than 6000 abstracts, they identified outcome parameters in the early post-acute and chronic situation, and the concepts of the reported parameters were quantified using the ICF as a reference. They state that the ICF provides a valuable reference to identify and quantify the concepts of measures focusing on SCI in the early post-acute and chronic situation. The finding that the data show a great diversity in the consequences of SCI is very important and underscores the importance of social participation and environment for persons with SCI.

Scheuringer *et al.* asked physicians, nurses, physical therapists, occupational therapists, social workers, and psychologists about problems in functioning and contextual factors of individuals with SCI using open-ended questions. All answers were linked to the ICF based on established rules. Their finding that ICF provided a comprehensive framework for integrating answers from different professional backgrounds and different world regions is important. Health professionals identified a large variety of functional problems reflecting the complexity of SCI. Unique aspects of functioning exist for the early post-acute and the long-term context.

A basic research study by Guo *et al.* describes how acellular spinal cord prepared through chemical extraction is qualified for some biological properties and may be a potential alternative scaffold for spinal cord tissue engineering.

A multi-center prospective spine surgery study by Kawano *et al.* compared neurological surgical and conservative treatment in a limited sample of cervical SCI patients without bone and disc injury suffering from spinal cord compression in the acute phase. Surgery was not found to be superior.

Other interesting papers deal with the Boberg Quality Score for In-Hospital Rehabilitation (Thietje *et al.*), evaluation of physical activity scale for SCI individuals with physical disabilities (de Groot *et al.*), prediction of severe neurogenic bowel dysfunction (Liu *et al.*), anemia and hypoalbuminemia (Frisbie), transanal irrigation in meningomyelocele children (Ausili *et al.*), electrical stimulation plus progressive resistance training for legs (Harvey *et al.*), and one case report on Brown-Séquard syndrome due to penetrating injury (Ye *et al.*).