

EDITOR'S PAGE

How is renal function 45 years after SCI?

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In this sixth issue of *Spinal Cord* 2016 you will find papers of interest for those active in basic research, clinical rehabilitation, and long-term follow up. We have included papers from many different parts of the world as a clear message that SCI is a worldwide issue, and that people across the globe are researching ways to improve its comprehensive management. We all can learn from one another.

Review: Arazpour *et al.* found, in a literature review, an influence of orthoses characteristics and options on the improvement of walking in patients with SCI. In particular, 'user friendly' orthoses that support the related structure such as the hip joint with a reciprocating mechanism, activated knee joint and movable ankle joint with dorsiflexion assist are valuable in this respect.

Basic research: Garanina *et al.* studied if genetic mutations, and replacing or disrupting the defective sequences might offer therapeutic benefits in neuro-degenerative diseases. Recombinant adeno-virus containing 2A-sequences could be valuable in conditions as ALS. A possible role in SCI needs to be evaluated. Wen *et al.* identified differentially expressed genes in the time-course of SCI, related to immune response. This may provide underlying targets for treatment. Coutinho *et al.* did not find significant differences in the recovery of locomotor function, nor in the histological and electrophysiological analysis in the rat treated with erythropoietin and tacrolimus after thoracic SCI.

Urinary system: Elmelund *et al.* give the clinically very important finding that renal deterioration can occur at any time after injury, suggesting that lifelong follow-up examinations of the renal function continue to be important, especially in patients with dilatation of the upper urinary tract and/or renal/ureter stones. One has to remember that renal deterioration was one of the main causes of death after SCI just some decades ago. Previnaire *et al.* determined outcome predictors for urethral injection of botulinum toxin to treat detrusor sphincter dyssynergia in individuals with SCI. The presence of detrusor contractions and normal bladder neck activity strongly predict an excellent outcome.

Syringomyelia: Krebs *et al.* studied the occurrence of syringomyelia in individuals with AIS A SCI. Those older than 30 years had an increased risk of syrinx formation within 5 years after injury.

Psychology, outcome, functioning: Smith *et al.* highlight that fatigue has a statistically significant negative association with participation for individuals with SCI, when controlling for pain, depressive mood, comorbidities, and level of injury. Scivoletto *et al.* demonstrate the value of SCI-ARMI, a tool based on the Spinal Cord Independence Measure (SCIM), which evaluates the success of rehabilitation and the rehabilitation potential after SCI, after controlling for the clinical (motor scores) and demographic (gender and age) factors. Another paper on this topic was published by Adinoff *et al.*¹ Verwer *et al.* examined the feasibility to use Psyfit (an online self-help program designed to enhance well-being in persons with depressed mood) in people with SCI and found a promising outcome. Results of this pilot study show that further adaptation may be necessary. Among a group of individuals in Poland, at least 15 years after SCI, Byra evaluated posttraumatic growth, basic hope and coping strategies by questionnaire. The primary finding was an increased appreciation of life. Specific coping strategies and basic hope played a significant role in fostering positive changes.

Hossain *et al.* report on the situation of SCI individuals after discharge in Bangladesh. Many people are house-bound, unemployed, living in poverty and have pressure ulcers. They experience moderate rates of depression and report limited quality of life. This shows that further development is needed.

Keep well and enjoy your summer.

¹ Adinoff E, Benjamini Y, Galili T, Polliack T, Front L, Bluvshstein V *et al.* Non-linear formulas for the spinal cord injury ability realization measurement index. *Spinal Cord* 2012; **50**: 324–327.