

AWARD

THE EUROPEAN ACADEMY OF REHABILITATION MEDICINE SCIENTIFIC PRIZE 2011

sponsored by **Journal of Rehabilitation Medicine**

On 29 May 2012, the 2011 European Academy of Rehabilitation Medicine award was awarded to Dr Joost van Middendorp for his PhD thesis entitled: 'On the Injuries of the Vertebrae and Spinal Marrow: Prognostic Factors and Classifications'. The thesis is freely accessible at <http://repository.uhn.ru.nl/handle/2066/83224>.

The thesis comprises two sections; the first section focusing on spinal column injuries and the second focusing on spinal cord injuries (SCI). On the spinal column injuries van Middendorp summarises that to date only a few reliable, validated spinal column injury classifications exist. Moreover, the scientific validity of currently known prognostic factors, including risk factors for complications, in the spinal trauma population is limited. Based on literature findings and clinical data, methodological recommendations are presented to facilitate future research initiatives which aim to identify valid risk factors or to introduce a novel classification system for the spinal column injury population.

SCI physicians from all over the world rely on the methodologically-sound 'International Standards for Neurological Classification of SCI' for over a decade. For the second section of his thesis Dr van Middendorp collaborated with the 'European Multicenter study for human SCI' (EM-SCI) network resulting in two key research projects. In the first project, the reproducibility and construct validity of the most prevalent syndrome in SCI, the traumatic central cord syndrome, was evaluated. In the second project, the predictive value of the initial neurological examination on ambulation outcomes after traumatic SCI was studied. This latter project resulted in the introduction of a novel and validated clinical prediction rule for independent ambulation outcomes after traumatic SCI.

In the thesis it is concluded that before progressing into an era of comparative therapeutic trials, a clear insight into the most relevant prognostic factors influencing patient outcomes is warranted. Furthermore, as patients are commonly stratified by spinal cord and/or spinal column injury severity in clinical trials, categorizations and classification of these injuries should ideally have been validated by demonstrating their clinical relevance, reliability, and accuracy. With regard to the methodological quality of clinical studies in the field of spinal trauma, there is considerable room for improvement. To improve the quality of everyday spinal trauma care in the future, it is our duty to improve the validity of future clinical studies' findings.

In 2007, the prize winner graduated in Medicine from Utrecht University, the Netherlands and was offered a position as a PhD student in clinical spinal trauma research at the Radboud University Medical Centre Nijmegen, the Netherlands. Supervisors were: Prof ACH Geurts, Prof RPH Veth, Prof Dr H Van de Meent, Dr AJF Hosman. He received his PhD degree.

After his PhD project, Dr van Middendorp worked as a Postdoctoral Research Fellow at the Queensland University of Technology and the department of Traumatology at the Princess Alexandra



Joost van Middendorp when giving his lecture.

Hospital, Brisbane, Australia. In March 2012, Dr van Middendorp started working in his new position as Research Director of the Stoke Mandeville Spinal Foundation, based in the National Spinal Injuries Unit at the Stoke Mandeville Hospital, UK. He is a current Research Fellow of the Harris Manchester College at the University of Oxford.



Professor Anne M. Chamberlain together with Joost van Middendorp at the prize ceremony.