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BOTULINUM TOXIN A IN ACUTE WHIPLASH INJURY. A PROSPECTIVE RCT STUDY. PRELIMINARY FINDINGS***Maria Goul Andersen; Helge Kasch****Danish Pain Research Centre and The Headache Clinic, Department of Neurology, Aarhus, Denmark*

Background: To day no known effective treatment is available for acute WAD. In chronic whiplash patients we have found dystonic features by EMG in more than 100 cases (Kasch et al. In prep). If patients present with dystonic neck muscles BTX-A is a possible treatment option and in open studies more than 40% have more than 50% headache/neckpain pain relief. **Methods:** 44 acute high risk whiplash patients exposed to MVA with no contact trauma, no loss of consciousness and no previous significant pain or other illness are consecutively included after verbal and written consent. Patients are randomized to either BTX-A or isotonic saline given EMG guided into neck muscles if dystonic activity is found (> 250 turns/s). A group of 12 age and gender matched controls of low risk patients are also seen and examined with EMG. Treatment and examination takes place between 2 and 4 weeks after injury. **Results:** Preliminary findings of marked dystonic features in previous healthy patients will be presented. **Conclusion:** Dystonic muscle activity in deep neck muscles such as splenius capitis and splenius cervicis, semispinalis and the multifidus and scalene muscles is identified in high risk acute WAD and might be targeted by BTX-A.

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COGNITIVE SYMPTOMS, CERVICAL RANGE OF MOTION AND PAIN AS PROGNOSTIC FACTORS AFTER WHIPLASH TRAUMA***Peter Borenstein¹, Mark Rosenfeld, Ronny Gunnarsson****¹The Stroke Unit, Department of Internal Medicine, Sahlgrenska University Hospital/Östra, Göteborg, ²The Research and Development Unit, Primary Health Care, Älvsborg, Borås, and ³Institute of Neuroscience and Physiology/Physiotherapy, Göteborg University, Göteborg, and ⁴Sahlgrenska School of Public Health and Community Medicine, University of Gothenburg (UGOT), Göteborg, Sweden*

Objectives: To evaluate pain, cervical range of motion (CROM) and cognitive symptoms as predictors for poor prognosis defined as sick leave 3 years later. **Material and methods:** In 97 patients CROM, pain intensity and cognitive symptoms were measured immediately following trauma, at 6 months and 3 years. Patients were also asked at 3 years if they had been on sick leave the last 6 months. **Results:** Pain intensity and reduced CROM were not clinically useful as predictors of later sick leave. The best predictors were presence within 96 h after injury of the two cognitive symptoms 'being easily distracted' (odds ratio 8.7–50) and 'easily irritated' (odds ratio 5.3–31). **Conclusions:** Initial pain and reduced CROM may be related to minor tissue damage which often heals while late functionality is more dependent on other factors such as cognitive dysfunction. For patients with whiplash associated disorders two simple questions should be asked; 'Are you currently easily irritated?' and 'Are you currently easily distracted (e.g. is it difficult for you to follow a conversation if several people are talking in the room at the same time)?'. An affirmative answer to any of these questions indicates an increased risk for poor prognosis defined as sick leave 3 years later.