

Paul Jarle Mork

Biography

Paul Jarle Mork received the M.S. degree in sport science from the Norwegian University of Science and Technology in 1998 and a PhD degree from the Faculty of Medicine, Norwegian University of Science and Technology, in 2006. He is now associate professor at the Human Movement Science Program, Norwegian University of Science and Technology. His main research interests are ergonomics and risk assessment of developing musculoskeletal disorders studied through the application of ambulatory data loggers of surface electromyography, joint postures and movement.



Abstract

Musculoskeletal pain due to working life conditions is a large socio-economic problem in the Western industrialized societies. Musculoskeletal problems are most frequent in the shoulders/neck and the low back and are more prevalent among women than men. It is well established that heavy physical workload represents a risk factor for musculoskeletal pain but prevalence rates are also high for workers with low physical loading. At present, there is limited knowledge about the critical exposures and the underlying pain mechanisms in work situations with low biomechanical loading. One possible mechanism is that pain develops from sustained low-level muscle activity leading to overexertion of muscle, or its functional component, the motor unit. This lecture describes features of work posture and 24-hrs trapezius EMG activity pattern and the possible relation to musculoskeletal pain in workers with low physical loading.

Mork, P.J. and Westgaard, R.H. (2006). Low-amplitude trapezius activity in work and leisure and the relation to shoulder and neck pain. *Journal of Applied Physiology*, 100, 1142-1149