

Exposure to sustained low-level muscle activity (SULMA) in different harvesters in relation to neck pain among forest machine operators -

Epidemiological field studies

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Abstract

Work-related upper extremity musculoskeletal disorders have a high prevalence within a considerable range of occupational groups (1) (2) also among forest machine operators in the Nordic and in several European countries (3). Operators in highly technological modern harvesters are exposed to static activity; however the effect of temporal work load pattern, e.g. time distribution of static muscle activity on the development of musculoskeletal disorders, is not well documented. Therefore, I will present a newly developed surface electromyography (sEMG) method that quantify SULMA periods and evaluate the method's ability to detect (4) and predict (5) pain development in the neck; differences found between operators driving harvesters in Norway and France (6) and the influence of different brands of harvesters with specific reference to hand movements of control levers (7).

Key words

Surface electromyography; work- and rest pattern; video; control levers; organization

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