

Relationship between symptoms and instrumental findings in the diagnosis of upper limb work-related musculoskeletal disorders

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KEY WORDS

Musculoskeletal disorders; occupational medicine; case definition; diagnostic tests; symptoms

SUMMARY

Background: *Upper limb work-related musculoskeletal disorders (UL-WRMSDs) are common among workers performing repetitive and forceful manual work. The diagnosis of UL-WRMSDs is mainly based on clinical features but its accuracy is further increased by physical examination and instrumental analysis.* **Discussion and Conclusions:** *In the occupational setting, several case definitions for UL-WRMSDs, based on different combinations of symptoms, physical examination findings and instrumental test results, have been proposed and published in the literature. Case definitions based on a combination of clinical history and instrumental findings would be preferred both for surveillance and epidemiological purposes. However, the use of instrumental tests introduces the issue of the poor level of agreement between symptoms and instrumental findings. Moreover, in the course of time both symptoms and instrumental findings tend to fluctuate and can be affected by several variables: exposure, individual factors, criteria used for data collection and time of examination in relation to work shift. As a paradigmatic example of UL-WRMSDs, the case of Carpal Tunnel Syndrome is discussed. In an improvement perspective, we suggest to focus on the following aspects: the monitoring of exposure assessment, the time of data collection in relation to work shift, the opportunity to collect clinical and instrumental data at the same time and the selection of normative data and of the best informative parameters for epidemiological studies.*