

Pain Analysis in Musicians Using Digital Pain Drawings

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Abstract : Background and aims: According to the existing literature, musicians are at risk to experience a range of musculoskeletal painful conditions. Recently, digital technology has been developed to investigate pain location and pain extent. The aim of this study was to describe pain location and pain extent in musicians using a digital method for pain drawing analysis. Additionally, the association between pain drawing (PD) variables and clinical features in musicians with pain were explored. Materials and Methods: One hundred fifty-eight musicians (90 women and 68 men; age 22.4 ± 3.6 years) were recruited from Swiss and UK conservatoires. Participants were asked to complete a survey including both background musical information and clinical features, the Quick Dash (QD) questionnaire and the digital PDs. Results: Of the 158 participants, 126 musicians (79.7%) reported having pain, with more prevalence in the areas of the neck and shoulders, the lower back and the right arm. The mean of pain extent was $3.1\% \pm 6.5$. The mean of QD was larger for musicians showing the presence of pain than for those without pain. Additionally, the results indicated a positive correlation between QD score and pain extent, and there were significant correlations between age and pain intensity, as well as between pain extent and pain intensity. Conclusions: The high prevalence of pain among musicians has been confirmed using a digital PD. In addition, positive correlations between pain extent and upper limb disability has been demonstrated. Our findings highlight the need for effective prevention and treatment strategies for musicians.

Keywords : pain location, pain extent, musicians, pain drawings

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