Musculoskeletal stress markers in Portuguese Late Neolithic population: What do they tell us?

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The aim of this work is the study of musculoskeletal stress markers (MSM) in seven skeletal samples uncovered from Late Neolithic Portuguese collective burials, representing a minimum number of 698 adult individuals. The human remains were recovered with no or almost no anatomical connection due to the burial practices, post-deposition activities and excavations with old methodologies. The analysis of MSM in upper and lower extremities was performed according to the methodology proposed by Crubézy (1988) and by individual bone. The more affected muscle/ligaments were the attachment of the quadriceps tendon (patella), affecting between 0% to 18.8% of bones and the Achilles tendon (calcaneum), with frequencies ranging from 0% to 66.75%. Statistical analysis was limited due frequently small and uneven sample sizes but the highest frequencies of MSM were scored in samples recovered from mountain regions. These observations could be linked to the greater mobility of these populations in daily movement and/or pastoral activities, also suggested by other morphological data including low femoral neck-shaft angle.

Key Words: Late Neolithic; Portugal; quadriceps tendon; Achilles tendon