

UPDATED APPROACH TO THE OLD TOPIC – INVESTIGATION OF ENTHESEAL CHANGES IN TWO ARCHAEOLOGICAL KUYAVIAN POPULATIONS USING METHODOLOGY BASED ON CURRENT MEDICAL KNOWLEDGE

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Background: In previous decades enthesal changes were frequently used to reconstruct activity patterns in past populations. Criticism of these studies primarily focused on insufficient knowledge about the aetiology of these changes and the lack of appropriate methodology for their description. Further interest in this topic resulted in the development of more detailed scoring systems. However, usefulness of these systems for the study of archaeological skeletons has rarely been tested.

Objective: The aim of this study is to analyse enthesal changes in the upper limb in two strongly culturally and chronologically differentiated populations using methodology based on up-to-date medical knowledge.

Materials and methods: The sample includes two series of adult skeletons from two closely located archaeological sites in Kuyavia (North-Central Poland): Neolithic (41 males, 37 females) and Medieval (43 males, 48 females). Villotte's scoring system (2006) was used to define the expression of five fibrocartilaginous insertion sites on the humerus and radius. Multivariable logistic regression was conducted to assess influence of historical period, age and sex on probability of occurrence of enthesal changes.

Results: Results indicate that more advanced age significantly increases probability of occurrence of changes at all analysed entheses. There is also a quite consistent pattern in the differences between populations: in four of the five studied sites, the probability of occurrence of enthesal changes is higher in the medieval series (one of these differences was statistically significant at $p=0.0096$ and the other was close to significance at $p=0.0505$). The results suggest a generally higher level of physical activity in the Middle Ages. Although enthesal changes are not absolute markers of physical strain, such analyses can still provide valuable information about activity in historical populations, provided that relevant methodologies are applied and results are interpreted cautiously.

Keywords: Fibrocartilaginous entheses; Enthesal changes; Markers of activity; Multivariable study.