

NEW DATA ON THE MORPHOLOGICAL TRAITS OF NEANDERTHAL TEETH FROM THE STAJNIA CAVE (POLAND)

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Background: Neanderthal fossils are rare, and in Poland they have been found at only two sites: Ciemna Cave and Stajnia Cave. At Stajnia Cave, nine Neanderthal teeth associated with Micoquian artefacts and dated to ~120,000–92,500 years ago were discovered. Although their morphology and taxonomic status have been confirmed, the internal morphological variation of Neanderthal teeth remains poorly understood.

Objective: The main aim of our study is to present new detailed data on the traits of the Neanderthal teeth from the Stajnia Cave including their internal morphology.

Materials and methods: The six of nine teeth whose characteristics of the internal morphology have not been described (including three permanent molars; 1 deciduous upper molar, 1 permanent upper incisor and 1 lower premolar) were scanned using a micro-computed tomography scanner and their 3D models were. The non-metric features observed on the surface of the enamel-dentine junction of these teeth were diagnosed and described. For molars with good state of the crown preservation, enamel thickness data were obtained. The analysed non-metric and metric traits of the examined teeth were compared with that known for the analogous types of teeth belonging to other Neanderthals and *Homo sapiens* (Palaeolithic and recent).

Results: The obtained data concerning examined specimens expand our knowledge on the morphological variability of Neanderthal teeth. Considering the dating of the examined teeth (marine isotopic stage 5), the described traits are particularly important for considering the phylogenetic significance of dental features within the Neanderthal evolutionary lineage.

Keywords: Neanderthals; Pleistocene; Teeth; Hominins; Morphology.