

DENTAL PROSTHESIS FROM THE AUGUSTINIAN TOMB: ADDITIONAL EVIDENCE FOR THE IDENTIFICATION OF GREGOR JOHANN MENDEL

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Background: In 2021, an archaeological–anthropological–genetic investigation of the Augustinian tomb at the Central Cemetery in Brno included the exhumation of skeletal remains of five members of the Augustinian Order. During this research, dental prostheses were discovered in the deepest coffin. The skeletal remains from this grave were subsequently identified as those of Gregor Johann Mendel using several independent methodological approaches.

Objective: The aim of this study was to provide additional evidence supporting the identification of Gregor Johann Mendel through a detailed material and technological analysis of the recovered dental prosthesis.

Subjects and methods: The dental prosthesis was subjected to a range of analytical methods, including X-ray imaging and scanning electron microscopy combined with energy-dispersive X-ray spectroscopy (SEM–EDX). These techniques enabled comprehensive characterisation of the prosthesis’s construction, elemental composition, and microstructural features. The obtained data were interpreted in relation to the historical development of restorative dentistry and known manufacturing technologies.

Results: The analyses revealed specific materials, construction principles, and microscopic characteristics consistent with historical dental prosthetic techniques. Comparison with documented advances in restorative dentistry allowed the prosthesis to be dated to the period between 1855 (1863) and 1926.

Conclusions: The documented dates of birth and death of the five Augustinians, including Gregor Johann Mendel (1822–1884), suggest that the dental prosthesis most likely belonged to Mendel, given its dating and evidence of prolonged use. This provides independent support for his identification and highlights the value of ancient dental restorations as dating and identification tools.

Keywords: Gregor Johann Mendel; Dental prosthesis; Identification; Augustinian tomb; SEM–EDX.

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