

Age estimation using destructive and non-destructive dental methods on an archeological human sample from the poor Claire Nunnery in Brussels, Belgium

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ORAL PRESENTATION

J Forensic Odontostomatol
2017 Nov 1; Supp1(35): 54
ISSN :2219-6749

ABSTRACT

Dental age estimation can be performed both in living and deceased individuals. In anthropology, few studies have tested the reliability of dental age estimation methods complementary to the usually applied osteological methods.

Objectives: In this study, destructive and non-destructive dental age estimation methods were applied on an archeological sample in order to compare them with the previously obtained anthropological age estimates.

Materials and Methods: One hundred and thirty four teeth from 24 individuals were analyzed using Kvaal, Kvaal and Solheim, Bang and Ramm, Lamendin, Gustafson, Maples, Dalitz and Johanson's methods.

Results: A high variability and wider age ranges than the ones previously obtained by the anthropologist could be observed. Destructive methods had a slightly higher agreement than the non-destructive.

Discussion: due to the heterogeneity of the sample and the lack of the real age at death, the obtained results were not representative and it was not possible to suggest one dental age estimation method over another.