

**ORIGINAL PAPER**

**Frequency and Distribution of Enamel Hypoplasia in Ancient Skulls  
from Different Eras and Areas in Greece**

**Theodoros Pitsios, PhD**

Associate Professor of Physical Anthropology, Anthropological Museum, Medical School, University of Athens Greece

**Vasiliki Zafiri, PhD Dentist, Dental Anthropologist,**

Anthropological Museum, Medical School, University of Athens Greece

**Corresponding author: Zafiri Vasiliki, dentist, dental anthropologist. Elaion 32, N. Kifisia 1454. Athens, Greece. vzafiri @med.uoa.gr**

**Abstract:**

This study presents an anthropological analysis of enamel hypoplasias from 309 skulls from archaeological excavations in various geographical areas of the Hellenic landscape belonging to different chronological periods. The sample comprises a total of 1386 permanent teeth of different morphological types were recognized and graded as to the feature of enamel hypoplasia. The examination of the enamel hypoplasia is based on macroscopic observation. The diagram used for the evaluation of this feature was the one proposed by Brothwell in 1971. The frequency of enamel hypoplasia in the dentition of ancient skulls from Greece is relatively restricted. Of the total of 1386 teeth examined, 323 teeth of the upper jaw displayed the characteristic linear hypoplasia which corresponds to 23.2 % of all cases. In particular, in the skull series we examined the greatest disruption of enamel formation was found on the canines of the upper jaw, while it also exists, albeit at a declining frequency, in the first molars, the second molars, followed by the lateral incisors and central incisors as well as the third molars. In the first molars, the frequency of hypoplasia is consistently high in the teeth of these skulls from all three periods examined (antiquity, the middle ages and the new age).

**Key words:** dental anthropology, infection, metabolic stress, nutrition, enamel, enamelblasts, calcium, skeletal material, skulls, archaeological excavation.