ANALYSIS OF HUMAN DENTAL REMAINS FROM YA’AMUN:
A LATE ROMAN – EARLY BYZANTINE SITE IN NORTHERN JORDAN

دراسة خليلية لأسنان سكان يعمون:
موقع روماني متأخر – بيزنطي مبكر
في شمال الأردن

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Abstract

Ya’amun village has been classified as a Late Roman and/or Early Byzantine site. Now, this archaeological site is situated about three (3) kilometers Southwest of Al-Noaimeh, Irbid governorate, Northern Jordan. The purpose of this research is to investigate and examine the most common major dental diseases and the dental morphology of Ya’amun people. A total of one thousand one hundred and sixty-four (1164) loose teeth were recovered from Ya’amun necropolis in 1999. These teeth were cleaned and thoroughly examined.

Teeth were classified and examined for three major pathological conditions (i.e. dental wear, dental caries and dental enamel hypoplasia). In addition to the twenty crown and root morphological traits. The aim of tracing dental morphological traits was to determine which major geographical racial sub-division Ya’amun people belonged to.

The findings of this study show the average of wear degree on Incisors, Canines and premolars (ICP), with the result of maxillary ICP being variable from the mandibular ICP. But both types have a decreased wear degree when moving from the central incisors to laterals. This is because wear degree is based on age specific process, and that the earlier teeth are erupted, the higher will be the wear degree. It has also been observed that canines and premolars have a higher wear degree than lateral incisors, and in certain cases, canines and second premolars have a high wear degree than central incisors, which could be attributed to the food preparation techniques and dietary constituents rather than to the age specific process. The high wear degree of second premolars is due to their natural position and function as they are located in the back next to the molars and are used for grinding rather than cutting, whereas the
pointed shape of canines and their major role in cutting and slicing food are responsible for their high wear degree.

The average of wear degree of the molars has been measured by using a separate scoring system, this wear degree decreases from the first molars towards the third molars. This is because the eruption of first molars is earlier than that of the second and third molars. Therefore, wear degree of the last two types successively comes next to the first molars.

It has been found that the average of wear degree on all teeth among the people of Ya’amon was the highest of all other sites and was variable from that among the other populations of the same period. This was probably due to the group variation between the sites concerned. So, this variation could be related to the differences in food preparation techniques and dietary constituents which distinguished Ya’amon people from the populations of Waqqas and Yasileh.

Though the presence of dental caries among Ya’amon people was observed, it was less than that of other sites of the same period like Yasileh and Waqqas. This should not be taken as a contradictory or discrepant bit of information. Because as a general rule, the higher we have dental wear, the lower we have dental caries. Besides, teeth among Ya’amon people may have been used largely as tools in certain crafts such as skin tanning. Because Ya’amon people represented an agricultural community subsisting mainly on grain, cereal and other plant products rich in carbohydrates, dental caries were present probably as a result of this. The incidence of dental enamel hypoplasia supports the idea mentioned above about the high plant food intake of Ya’amon people, and suggests that they suffered from a number of environmental and nutritional stresses which were not always severe in any case.
Finally, from the dental morphological traits observed among Ya’amun people, it can be easily gathered that they are classified within the Western Eurasian major geographical sub-division, namely the Caucasoid race. Such conclusion was expected, hence Ya’amun is situated in Northern Jordan, the centre of the geographical area which was dominated by the aforementioned racial sub-division, exactly like other contemporaneous populations in Northern Jordan of the same period like Yasileh and Waqqas.