Dental indicators of health in early Neolithic and Iron age skeletons from Taiwan.

M. Pietrusewsky¹, A. Lauer¹, C.H. Tsang². ¹Department of Anthropology, University of Hawaii at Manoa, ²Institute of History and Philology, Academia Sinica.

Examining several indicators of oral/dental and physiological health and lifestyle (dental caries, antemortem tooth loss - AMTL, alveolar defects, dental calculus, linear enamel hypoplasia-LEH, and dental attrition) this study investigates biocultural implications of changes in subsistence from the earliest Neolithic to later Iron Age Taiwan. The archaeological human skeletal assemblages investigated include 1) Nan Kwan Li East (NKLE) (n=24 individuals), a site located in Tainan County in southern Taiwan associated with the Tapenkeng culture (c. 5000 years BP), the earliest Neolithic cultural sequence in Taiwan and 2) Shih San Hang- SSH (n=23 individuals)], an Iron Age site located in (c. 1800-500 years BP). The main hypotheses tested is that higher frequencies of indicators of stress will be observed in the later Iron Age skeletons than in the earliest Neolithic skeletal series and variation in individual indicators of health will be observed between males and females.

Contrary to expectations, low frequencies of dental caries, alveolar defect, and AMTL were observed in both series. Likewise, significantly lower frequencies of LEH were observed in the SSH assemblage. As expected, significantly higher frequencies of extreme dental attrition were observed in the NKLE series and significantly higher frequencies of calculus were observed in the SSH series. With the exception of dental calculus, the overall health of the later Iron Age series was slightly better than the earliest Neolithic ancestors of Taiwan’s aborigines. Significant differences in frequencies of these indicators for males and females were not observed.

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This study examines several indicators of health (dental caries, antemortem tooth loss, alveolar defects, evidence of periodontal disease (calculus), and linear enamel Hypoplasia,) and lifestyle (dental attrition and tooth ablation) in two early human archaeological skeletal assemblages representing the earliest Neolithic and later Iron Age Periods of Taiwan, the ancestors of present day Taiwan aborigines. The Nan Kwan Li East site ($n=24$ individuals), located in southern Taiwan (Tainan County), is associated with the Tapenkeng culture (c. 5000 years BP), the earliest Neolithic cultural sequence in Taiwan. The Shih San Hang site ($n=23$ individuals), located in Taipei Prefecture, northern Taiwan, associated with the Shihhsanhang Culture (c. 1800-500 years BP).

These indicators of health and lifestyle are used to interpret the biocultural implications of agriculture and changes in subsistence from earlier to later prehistoric periods in Taiwan by testing these hypotheses: 1) higher frequencies of indicators of health will be observed in the Shihhsanhang remains than in the Nan Kwan Li East series, 2) variation in individual indicators of health will be observed between males and females, and 3) regional difference in the frequencies of these indicators will be observed.

This study focuses on dental and physiological health and lifestyle among Taiwan’s earliest Neolithic inhabitants and those from the Iron Period.

This study uses several indicators of dental and oral health and lifestyle to interpret the biocultural implications of changes associated with the transition from the earliest Neolithic to later Iron Age coastal cultures in Taiwan.

This article uses dental caries prevalence to interpret the biocultural implications of agriculture among these people by testing the following hypotheses: 1) Yayoi period agriculturalists had greater frequencies of carious teeth than Jomon period foragers, 2) regional variation in carious tooth frequencies will be observed among Yayoi period agriculturalists, while 3) variation in carious tooth frequencies will be observed between male and female agriculturalists.

This study examines oral and physiological health in one of the earliest Neolithic assemblages (Nan Kwan Li East) now available from southern Taiwan and in an Iron age assemblage (Shihhsanhang) from northern Taiwan.

This study examines differences in patterns of diet and subsistence through the analysis of dental pathology and tooth wear in Nan Kwan Li East skeletal remains that represent the earliest Neolithic culture (c. 5000 years BP) of southern coastal Taiwan and Shihhsanhang (c. 1800-500 years BP) of northern coastal Taiwan.
This study analysis health and lifestyle difference between the earliest Neolithic and late Iron age inhabitants of Taiwan, the ancestors of present day Taiwan aborigines.

The subsistence pattern of Taiwan’s earliest coastal cultures include sea and land resources involving agriculture, hunting, fishing and collecting shellfish.

Results reveal significant difference in indicators of health and lifestyle.

Results also suggest that some of the differences observed among the four sites may reflect geographical or environmental factors rather than simply cultural ones.

However, despite these distinctions, the overriding trend appears to be one of general continuity, good health among