

## ANTHROPOLOGICAL SIGNIFICANCE OF ALVEOLALGIA

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## TOOTH EVULSION AMONG THE ANCIENT ETRUSCANS: RECYCLING IN ANTIQUITY

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Tooth evulsion among the southern Etruscans, particularly around the area of Tarquinia, about 96 km north of Rome, has been suggested by indirect evidence. A long term program of study of Etruscan and other ancient dental appliances (Becker 1994a,b; in press) has revealed answers to many questions regarding the use of these items. The myth that the Poggio Gaiella appliance had orthodontic value (Corruccini and Pacciani, 1989) has been dispelled (Becker, Ms. A). The most notable finding of this research, based on direct, intensive study of nine examples and the skulls and teeth which they are now associated, has been that all of these appliances were made for women. In particular, the majority appear to have served purely ornamental functions, with the retention of loose teeth clearly a secondary and possibly only incidental result of their use. This fits with what we know about the public presentation of Etruscan women, who held relatively high status in their society. Both Greek and Roman women at that time were bound by cultural "avoidances" that severely limited their appearance in public.

Another important conclusion from this research is that the manufacture and use of these "appliances" was concentrated in southern Etruria (in central Italy between the Arno and Tiber rivers and between the Apennines Mountains and the Tyrrhenian Sea), perhaps limited to the region within the cultural sphere of Tarquinia. The decline and end of the use of the Etruscan type appliances appears to correlate with the Romanization of this region, which accelerated sharply in the first century BC. Since jewelry and other ornaments continued to be worn by women from all cultures in this region, the question to be asked concerns the loss of that quite specific aspect of Etruscan culture relating to women and dental ornamentation.

Placing this question in another context has opened up the possibility that a hitherto unrecognized cultural phenomenon is critical in this particular aspect of culture change. Since maxillary central incisors are not commonly lost to decay or to any other natural cause, one might wonder about the source of a demand for pontics that almost invariably include one or both maxillary central incisors.

My hypothesis is that tooth evulsion was practiced in Etruria and that the gold pontics were used as replacements and as ornaments. Furthermore, the false teeth may have been made from ivory or other durable materials. I suspect that in some cases the removed teeth were recycled as the material from which false teeth were cut and later riveted into the gold appliance.

The Etruscans and most Iron Age Italic peoples practiced cremation, thereby reducing sharply possible observations of the alveolar regions by which tooth evulsion might be identified. By the 7th century BC inhumation had become the rule throughout this region. Yet, preservation in large open tomb situations was poor (Becker, 1993).

Before 1987 few skeletal remains had been recovered from the area, let alone provided adequate curation. Recent excavation programs at Tarquinia have generated useful samples of skeletal material. A careful review of the fragmentary remains now in storage at Tarquinia may provide support for this thesis regarding tooth evulsion.

At this time I am interested in archaeological as well as ethnographic information regarding tooth evulsion. A. M. Haeussler has pointed out to me Suzuki's (1982) important paper. I would very much appreciate having interested colleagues send to me other references to tooth evulsion, from any context. The information contained within the literature will be useful in drawing possible cultural comparisons with what is now known regarding Etruscan culture.

## TOOTH EVULSION AMONG ETRUSCANS

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## DENTAL ANTHROPOLOGY ASSOCIATION SECTION



### A Tribute

Cornelis Adriaan Willem (KEES) Korenhof (1929-1994)

A dynamic personality and drive, characterized his accomplishments and leadership in research and teaching as well as his stimulating guidance of the Netherlands "Tandheelkundig Genootschap." His horizon extended far and wide reaching as in depth knowledge of clocks and their restoration. When our 250-year old Frisian clock suddenly refused to run and turn the moon, day, and date wheels, one phone call to Kees brought expert advice an unfailing remedy.

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### Re: Malaria, Enamel Hypoplasia, Apes, Humans, and Grantsmanship

Dear Colleagues,

Are you aware of any skeletal/dental collections or studies in which we could test the hypothesis that malaria causes linear enamel hypoplasia (LEH) in humans? In our recent grant application to the Natural Sciences and Engineering Research Council of Canada, we asked for funding to examine whether regularly recurring LEH in fossil and contemporary apes (commonly observed) might be due to rainy seasonal malarial outbreaks. We were refused funding primarily because the reviewers wanted us to show first that malaria causes enamel hypoplasia in humans. We know of no such study or test sample; basically patients are treated clinically and to our knowledge, no one has bothered to examine the teeth of older children and adults who in young childhood (when the dental crowns are forming) had malaria. If you know of any collections of human remains that are certain or highly suspected to have had malaria, or are from malarial regions, please let us know at your earliest convenience. Thank you.

Yours sincerely

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