Etruscan Gold Dental Appliances: Three Newly "Discovered" Examples

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MARSHALL JOSEPH BECKER

Abstract

Dental appliances fashioned from flat gold bands are known from references in ancient Roman literature and have been recovered from archaeological contexts since the late 18th century. Wire appliances of gold and silver are known from the eastern Mediterranean and have completely different origins and functions. Recent research on the known corpus of these ancient appliances, many of which have been lost, provides considerable insight into their cultural uses as well as their place in dental history. Of considerable interest are three Etruscan examples, now lost, that were brought to the United States in the 19th century. The origins and configurations of these three appliances are discussed here to augment what is known about other Etruscan examples, of which only 20 can be documented and nine survive. All appear to have been used as decorative bands or to support replacements to one or both upper central incisors of women from whom healthy teeth had been removed deliberately.*

The Etruscan origins of gold dental appliances, around the middle of the seventh century B.C., have long been recognized.¹ These appliances are all fashioned from flat gold bands, and used to hold a false tooth or teeth in place or to stabilize teeth loosened by periodontal disease. Several lists of these appliances have been presented over the past century, but attempts to generate a complete catalogue have long been thwarted by the presence of numerous modern copies, poor descriptions in the literature, and by erroneous identifications of various other objects as examples of ancient dental work.

Many false examples of ancient dental appliances have been created by publishing photographs of them upside down, or by reversing the negative in making a print. Thus a single object can be turned into four examples through errors in the making or use of a single photograph. The negative of an appliance believed to be fitted to the upper right jaw, when printed backward, appears to represent an appliance from an upper left jaw. When inverted these two prints become four examples, but all may derive from a single negative. While this might seem a simple problem to correct, only an important recent study by L. Bliquez has resolved many of these issues.²

The following observations derive from a project to identify and describe in detail all the known examples of Etruscan gold dental appliances and other ancient dental prostheses. During an exhaustive search of the literature three Etruscan examples were identified as having been brought to the United States, but were lost about 100 years ago.

ANCIENT DENTAL APPLIANCES

An effort to reconcile the very limited archaeological evidence with direct information from the study of Etruscan dental appliances and the teeth associated with them has further expanded understanding of this subject. Two sources of information neglected by previous studies have significantly advanced our understanding. First, the direct evidence incor-

* This project was conducted while I was a Consulting Scholar to the Mediterranean Section of the University of Pennsylvania Museum of Archaeology and Anthropology. I would like to thank Donald White, Curator of Mediterranean Archaeology, for his encouragement and support of this research. My sincere thanks are also due John Bennet and an extremely careful anonymous AJA reviewer for their contributions to the completion of this manuscript, and to the many other people who helped in so many different aspects of this research. Special thanks are due Larissa Bonfante and Ingrid Edlund for their help in guiding this project in its earliest phases and to Lawrence Bliquez and John Robb for their generous sharing of important data relating to my general study of ancient dental appliances. A portion of the information concerning William Barrett was originally gathered in 1991 at the request of William Feagans, Dean of the Dental School at the State University of New York at Buffalo. Those data were incor-


from odontometrics—the measurements of the elements that make up these appliances and/or any teeth that have survived—suggest that only Etruscan women wore them.3 Second, detailed examination of the extant examples has yielded precise information regarding their construction.4 When combined with the extensive archaeological data, this new evidence seems to confirm that gold dental appliances were worn only by Etruscan women, suggesting that cosmetic concerns were paramount in their creation. This accords well with what is known about Etruscan women and their public presentation. The decline of Etruscan culture in the face of growing Roman dominance also may explain why these appliances appear to have faded from view, probably in a pattern parallel to the decline in the use of the Etruscan language.5 The literary evidence for Roman use of dental prostheses remains unsupported by archaeological evidence. Different mortuary customs among the Romans may have resulted in the removal of gold appliances before interment, or the use of these decorative items may have been restricted to Etruscans living among the Romans.

Direct and detailed study of the nine surviving Etruscan appliances and, whenever possible, the few teeth that survive has been basic to the creation of a new catalogue. Also included in this new list are the six known “Eastern” wire dental appliances associated with the later Phoenician tradition. These are fashioned from gold or silver wire, but appear to have served purposes distinct from those of the Etruscan form. The Eastern appliances, however, were only worn by men.6 A catalogue incorporating all of the known appliances as well as some suspected examples also enables us to identify copies, of which many exist, as well as specific examples of appli-
cances and objects that have been considered to be dental implants.7

Intensive searching of the archaeological, dental, and technical literature has revealed two examples that had come to the United States and were not noted in previous catalogues. A third and nearly unknown example was also brought to America about the same time. All three of these specimens, now lost, were originally published in obscure journals. In this article I collate the evidence on these pieces and assess their contribution to our understanding of this important aspect of Etruscan technology and culture.

THE BARRETT APPLIANCES

William C. Barrett, first Dean of the Dental School at the State University of New York at Buffalo, was a friend and colleague of James Gilbert Van Marter (1835–1901), who practiced dentistry in Rome during the 1880s. Barrett held his D.D.S. from the University of Pennsylvania (1881) and appears to have known Van Marter from his student days. Barrett’s interest in early dentistry led him to ask Van Marter to secure examples of Etruscan gold bridework. Van Marter, who had been studying the Etruscans for “several years,” notes that he had been visited in Rome by the late J. Marion Sims.8 The date of Sims’s death, ca. 1880, may provide a clue to the length of Van Marter’s residence in Rome. Wolfgang Helbig, an important figure in Italian archaeology, introduced Van Marter to C. Dasti, who was an archaeologist and mayor of the village of Corneto (now renamed Tarquinia), at the center of the south Etruscan area from which these ancient dental appliances most likely originate.

Barrett was also the editor of the Independent Prac-

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7 M.J. Becker, Journal of Paleopathology (supra n. 4); and Becker, “Ancient Dental Appliances” (unpublished manuscript).

8 J.G. Van Marter, “Some Evidences of Prehistoric Dentistry in Italy,” Independent Practitioner 6 (1885) 1–5; see also Van Marter’s brief summary of this article in “Prehistoric Dentistry,” Archives of Dentistry 2 (1885) 87–89. This information also appeared as Van Marter, “Dall’odontoiatria nei tempi antichi,” Giornale di corrispondenza per dentisti 14 (1885) 227–31.
titioner (which subsequently became the *International Dental Journal*), and published two of Van Marter’s communications. Van Marter acquired the teeth before 1886, as well as all of the items then thought significant from this tomb. Helbig had dated the tombs on the basis of his evaluation of the other materials found together with these appliances. Edlund confirms Helbig’s evaluation.

Van Marter’s letters to Barrett describe the excavation of several rich Etruscan tombs in the area of ancient Tarquinia, from which gold dental prostheses were often recovered. By 1886, Barrett’s request for some examples for his private collection resulted in two being sent to Buffalo. After the first appliance (fig. 1) had arrived, Barrett requested another, together with the archaeological materials from the same tomb. The second example that Van Marter purchased (fig. 2) was described as follows:

The most recently opened and the oldest Etruscan tomb yet discovered in Italy was lately excavated at Capadimonte [sic], near the Lake of Bolsena. The entire contents of this tomb, including three teeth bound together with a band of pure gold, gold spiral rings for the side hair, silver finger ring, necklace of amber and glass, arm band, bronzes, vases, etc., etc., I take pleasure in sending you by first express. The part of the find of interest to our profession is the three teeth, a drawing of which I send you herewith. This tomb belongs to the 11th Century B.C., or about one hundred years prior to the dates of the oldest partial denture which I sent you last year.

Both of the Barrett gold appliances were simple bands, within which only some of the original teeth may have remained. Waite suggests that he borrowed both pieces in 1885, and exhibited them before two New York dental societies. As noted below, a third example appears to have been added to this collection during the years after 1885. By the time of Barrett’s death in 1903, however, the location of the three appliances was unclear, and their present location remains unknown.

The Etruscan gold dental appliance that I identify as Barrett I (fig. 1) had been in Barrett’s collection in Buffalo, New York, but its present location is unknown. This appliance, from an unknown source in Etruria, is a simple band that probably had been worn in the upper jaw of a woman, enclosing at least three of her maxillary incisors. The date of this prosthesis has been roughly estimated to be in the sixth century B.C.

Only one obscure publication, by J.N. Farrar in 1888, provides us with direct information concerning the Barrett gold appliances. Two years prior to this publication, Van Marter made a reference in a letter to an example that now can be identified as the Barrett I appliance. In that letter Van Marter have been known to these dentists in manuscript form prior to its publication. The resulting drawings, published by W.H. Waite, “Association Intelligence, Western Counties’ Branch,” *Journal of the British Dental Association* [now *British Dental Journal*] 6 (1885) facing p. 512, are of the pair of appliances now in Liverpool. Detailed publication of the Liverpool appliances is forthcoming.

13 Waite (supra n. 12) 316–17, 499–512. See also Waite’s item under “Pre-historic Dentistry, Specimens Exhibited,” *The Dental Record* 5 (1885) 442–43.


15 Van Marter 1886 (supra n. 9) 59.

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12 Van Marter 1886 (supra n. 9) 59. A pair of dental appliances brought to Hereford, England in August of 1885 appears to be the Liverpool pair, not the Barrett pieces. Spence Bate, of the Western Branch of the British Dental Association, suggested using funds at hand to illustrate these pieces, inasmuch as the *Independent Practitioner* “did not circulate largely in this country.” This would appear to be a reference to Van Marter’s article of 1886, which may
must have seen the first two pieces acquired by Barrett while he was in Buffalo, or have been shown both when Barrett was touring with these appliances. Lacking data on the numerous examples then known in Italy, Farrar illustrated his brief text on ancient dental goldworking technology with the two examples that he had near at hand. This decision is quite fortunate for us, as today this record provides the only illustration known for the Barrett I appliance.

The second simple band appliance, identified as Barrett II (fig. 2), was found at Bisenzio (Visentium) at Capodimonte near Lake Bolsena. In 1886, soon after its discovery, this appliance was sent to Barrett in the United States. Along with the other two appliances owned by Barrett, this piece disappeared after 1903. This band also had been designed to be worn in the upper jaw of a woman, spanning at least four and possibly five teeth. A date of ca. 500–480 B.C. has recently been suggested by Edlund for this tomb group, confirming Helbig’s evaluation in 1886 when the tomb was excavated. In addition to Helbig’s and Edlund’s references to the Barrett II appliance, eight other published notes make mention of it. The few authors who attempted to describe this simple appliance, without having it available for study, have done little more than confuse their readers.

Van Marter’s letter of 1886, quoted above, provides a date for this tomb as well as a good drawing of the appliance. Helbig clearly states that all of the objects in the tomb containing the Barrett II appliance were acquired as a group by Van Marter, acting as the agent for Barrett. Van Marter also notes that he sent this piece to Barrett. Farrar, however, offers what appears to be a different account, but he may be referring to an entirely different prosthesis. Farrar says that the excavation took place in 1886 and that the entire contents of the tomb were bought by the American dentist William Carr and presented to “W.C. Barrett, and now constitute a portion of his private museum. The specimens in this collection are especially interesting to the dentist [including carious molars].” The possibility that this is the third dental appliance that came to the United States, as discussed below, cannot be ruled out. Alternatively, Farrar may simply have confused the names of the

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16 These publications, in order of their appearance, are Van Marter 1886 (supra n. 9) 59–60, fig. 8; Helbig (supra n. 10); Farrar (supra n. 14) 33, figs. 5 and 7; C.R.E. Koch ed., History of Dental Surgery I (Fort Wayne 1909) fig. 5; F. Weege, “Das Museum der Villa Papa Giulio,” in W. Helbig, Führer durch die öffentlichen Sammlungen klassischer Altertümer in Rom II (Leipzig 1913) 312–81; K. Sudhoff, Geschichte der Zahnheilkunde (Leipzig 1926) fig. 52 (and the later editions); B.W. Weinberger, An Introduction to the History of Dentistry I (St. Louis 1948) 125, fig. 414; Edlund (supra n. 11); D.J. Waarendburg, “Auro dentes nuncit: An Inquiry into the Study of the Etruscan Dental Prosthesis,” in M. Gnade ed., Stips votiva: Papers Presented to C.M. Stibbe (Amsterdam 1991) n. 5: no. 14; and Bliquez (supra n. 2) “R,” fig. 28.

17 Helbig (supra n. 10) 26, n. 1.

18 Farrar (supra n. 14) 33.
principals involved in these dealings. In his treatise,²⁹ he provides the following information:

Besides these teeth, there were three that were bound together with a gold band; also the crown of another (central), bound with a similar devise. Figs. 5 and 6 illustrate the two specimens, and show the relation of the bands to the teeth in side view. In Figs. 7 and 8 the plain lines show the top view of the bands detached [sic] from the teeth as they appeared when I saw them. When in use, however, these bands were undoubtedly bent as shown by the dotted lines. These bands were probably bound to the teeth with gold wire as shown in Fig. 9 [the Gaillardot gold wire appliance now in the Louvre; fig. 3 here]. The tomb contained other antiques, a list of which is given below, as evidences of the high rank held by the occupants of the tomb, and to show that consequently these specimens of denture were probably of the best that the period afforded.

Farrar’s list of artifacts is as follows: “two spiral gold rings, incised hair ornaments, one silver finger ring, necklace of lapis lazuli and pure amber, bronze plaque [sic] nearly 2 feet in diameter (with lions’ feet and sea horses in full relief), one large bronze vase with ear pieces representing the Taurian Jove, bronze ornament, evidently an armour-piece for the head, bronze wine-strainer, silver ‘fibrilla,’ two bronze cups, four earthen jugs (two finely molded), two vase handles with carved head and tail pieces.”

From Farrar’s comments one cannot tell if the two appliances came from this tomb or from two separate tombs. Farrar illustrates this appliance as if it were a mandibular prosthesis, an extremely unlikely possibility. His identification of this appliance as mandibular, however, may reflect the “position” in which it was observed during the excavation of the tomb. A second premolar, canine, and central incisor appear to be present, with one space between each. Most likely this was a maxillary prosthesis.

Weege’s list of dental appliances includes one said to come from Capodimonte. The description is too vague to identify it as the Barrett II piece or yet another dental appliance, and it could even refer to an appliance reported from Bracciano that has very recently come to light in Austria.³⁰ Also of importance in Weege’s text is the reference to an example that Van Marter says had been sent to Barrett during the previous year, about 1885 (Barrett I, see above).

Van Marter’s description of the Barrett II appliance is not very clear, nor does his illustration enable us to recognize details.²¹ Van Marter’s poor description is repeated by Helbig,²² who suggests that this prosthesis was worn by a woman or a “giovinetta.” The three teeth, bound with a thin gold band, are said to be the upper left lateral incisor, canine, and premolar. Helbig clearly indicated that the band might only have served to hold a naturally loosened canine in place, rather than serving to hold a transplanted tooth in that position. The canine, however, is less likely to have been loosened by a blow or periodontal disease than either of the adjacent teeth. Koch provides a poor sketch, probably derived from Van Marter’s figure, that incorrectly illustrates this piece as mandibular.²³

Farrar’s illustrations show a simple gold band that appears to have extended around five teeth. This type of band can be used to stabilize loose teeth, or may have been purely decorative. The lack of details regarding the context in which it was found and complete absence of associated skeletal material prevent us from making any determination of function. The three teeth shown by Farrar’s illustration

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²⁹ Farrar (supra n. 14) 33.
³⁰ Weege (supra n. 16) 371. A possible new Etruscan dental appliance said to come from Bracciano recently has come to light in Vienna; see M. Teschner-Nicola et al., “Very Early Dental Bridgework,” Homo 45, Suppl. (1994)

= 107

ETRUSCAN GOLD DENTAL APPLIANCES

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²¹ Van Marter, Independent Practitioner (supra n. 8).
²² Van Marter (supra n. 8); Helbig (supra n. 10) 25; Koch (supra n. 16); Bliquez (supra n. 2).
²³ Koch (supra n. 16) 16, fig. 5.
may derive from the original owner, but this is not certain. Possibly two of the five teeth held within this appliance were lost after death, and the remaining teeth survived at least until they entered Barrett’s collection.

Clearly this very narrow gold band had been pinched together in the two spaces where teeth were not present when drawn by Farrar. This certainly occurred after recovery from the tomb, as a deliberate effort to retain the surviving three teeth within the band. This appliance is similar, in this respect, to an example from Tarquinia published by Weinberger in which the thin band has been pinched together in the center where it once embraced a tooth.24

Weinberger refers to the Barrett II appliance in his text and suggests that it is a mandibular prosthesis enclosing the right central and lateral incisors, right canine, and both premolars, with the teeth illustrated representing the central incisor, canine, and second premolar. Weinberger’s description of the appliance is typical of those derived from poor photographs by individuals who have no idea how these appliances were made or used. Weinberger states that this appliance is a series of rings connected by spacing bars where the first premolar and second incisor are missing. Since most of the published statements on this and almost all of the other known appliances include descriptions based on poor illustrations and vague speculations regarding the actual pieces, we can understand why so much confusion has entered the literature.

The Barrett II appliance must have been recovered about 1885, and Helbig provides a description of the tomb goods.25 He suggests that the appliance is from a “tomba a fossa che furono scoperte in uno strato inferiore a quello testo descritto,” one that appears to be early fifth century B.C. in date. Helbig concludes that the earlier tomb with the Barrett II appliance dated from the sixth century B.C., and that the appliance is thus the earliest example known. Edlund places the three surviving artifacts that were recovered from the tomb with the appliance in the fifth century, and a date of 500–480 B.C. seems reasonable. Helbig’s evaluation of the date, on the basis of Attic vases from a tomb at Tarquinia, did not contradict his statement that at that time this was the earliest known example of a gold dental appliance. Only in 1898 was an earlier example discovered at Satricum. Helbig also referred to “Table X, 8 and 9” as indicating that literary sources offered confirmation of the antiquity of these appliances.26

Barrett died in 1903. His estate supposedly was divided between the University and the Buffalo and Erie County Historical Society.27 Edlund describes the three vases, all common types, now held in the Historical Society. Raymond J. Hughes, Curator of the Museum of the Society, provided useful data to Edlund about 1980. Although Barrett died in 1903, the acquisition is reported to have become official only in 1930, possibly being considered as loans until that time. Since Barrett’s widow died about 1925, these vases may have remained in her possession until her death. If all of the Barrett materials remained with his widow, who suffered various difficulties prior to her death, the gold appliance or appliances as well as the more valuable items in the collection may have been sold between 1903 and ca. 1925.

Aside from the three vases noted by Edlund, all of the other pieces from this tomb, including the dental appliance, are lost. Mildred F. Hallowitz, History of Medicine Librarian of the Health Sciences Library at the State University of New York at Buffalo, provided Edlund with information regarding the bequest of artifacts to the School of Dentistry. These items should be compared with observations made by Helbig. One item, a bronze situla, has been noted as possibly in Dresden, but there may be some confusion between the Barrett tomb bronzes and other bronzes that Helbig notes went to Dresden.28

The Albright-Knox Museum in Buffalo now includes a small collection of ancient artifacts. The location of the Museum across the street from the Erie County Historical Society, to which some of the Barrett collection supposedly had been bequeathed, suggests that it should be checked for Roman or Etruscan ceramics or other items that may have once been held by Barrett. Similarly, the enormous warehouse of the Erie County Historical Society, opened in 1990, contains vast numbers of boxes that have yet to be inventoried. One or more of these three small Etruscan gold dental appliances may be among these vast holdings.

THE VAN MARTER APPLIANCE

A third appliance, also now missing, was found near the Lake of Valseno (Bolseno), near Rome (fig. 155), a reference that I have been unable to locate.

24 Weinberger (supra n. 16) 125; also Becker, unpublished manuscript (supra n. 7) on appliances from Tarquinia.
25 Helbig (supra n. 10); see also Edlund (supra n. 11).
The Van Marter appliance has three rings that have been cold-welded into a series, a design that is typical of Etruscan pontics. The only known reference to this Etruscan dental prosthesis has been "buried" in an obscure publication for over 100 years; only a drawing and brief description published by Van Marter preserve this item for us, and it is fitting that this example be named for him.29 Although the associated skull had crumbled in the tomb, the description of the appliance leads me to believe that it was a maxillary prosthesis (upper jaw), and worn by a female. The date of 600 B.C. assigned by Van Marter must be considered as speculative.

Aside from our knowledge that Van Marter was a friend of Barrett's, we know nothing of his life and training prior to 1889. In that year, or shortly before, Van Marter then living in Rome, noted that this dental appliance had been "taken from an Etruscan tomb lately opened not far from Rome on the lake of Valseno." Van Marter notes that the three rings of the specimen are welded, with no joints being evident as would be the case with soldering. Clearly he is describing a cold-welded Etruscan appliance, typical of the type using a series of rings. The anchor teeth to which this bridge was attached are not illustrated. Van Marter describes the false tooth, located in the central ring, as "a bicuspid, turned one-fourth round on its axis." Although his illustration shows this in a "mandibular" position (fig. 4), the "bicuspids," or premolar, appears to be a large right maxillary example. If this were the case, this appliance would have bridged the spaces between the upper right canine and right second premolar. This is a very unlikely series (replacing a first premolar). I suspect that the false tooth is actually meant to replace a central incisor, and that the appliance bridged both the other central and one lateral incisor.

From the illustration it appears that the replacement tooth in the Van Marter bridge is held in position like a gemstone, in a fashion similar to that of an example in Copenhagen, described below. The construction of the Van Marter prosthesis certainly appears similar to that of the Copenhagen bridge. This appliance may be one of five examples that Dunn noted as "lost," presumably to private collections.30

BRIEF DESCRIPTION OF THE COPENHAGEN PROSTHESIS

The Copenhagen prosthesis (figs. 5–6), in the Danish National Museum, has recently been published in detail, providing an excellent comparative example for reconstructing the Van Marter appliance.31 Riis believes that it came from Orvieto, and associated ceramics appear to indicate a date of ca. 500–490 B.C.32 This three-ring gold prosthesis was meant to be worn in the upper jaw of an adult female. The Copenhagen gold dental prosthesis uses a complex variation of the simple band technique—that of welding individual "rings" or small loops each of which is fitted to a single tooth. This technique is only one of several known construction variations.

The Copenhagen bridge is made of three separate rings cold-welded together. The left loop is fitted to the upper left central incisor (11), and the loop on the other end had been fitted to the right lateral incisor (12). These teeth served as the anchor, or "post," teeth, those sound or living teeth to which the bridge was attached to hold it in place. The rectangular central loop held a false tooth. No rivet (pin) is needed in this type of bridge since the false tooth had been held in place in the way a gemstone is fixed in its setting. A small band was made and then fitted with the false tooth in the same fashion that a goldsmith would make any bezel setting. The rectangular setting would prevent rotation and facilitate a good fit, and the false tooth would then be secured in place by pressing the gold tightly as with the gold of the lateral loops.

Three separate straps or bands were fashioned into loops, the lateral examples to surround an an-

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30 C.G. Dunn, L'arte dentaria fra gli Etruschi (Florence 1894).
31 Becker 1992 (supra n. 4); and Becker 1994, Dental Anthology Newsletter (supra n. 4).
chor tooth, and the middle loop to hold the now missing false tooth. Each of the three loops is seamless, and all are joined at their adjacent surfaces by invisible welds, probably cold welds made after each of the individual bands had been shaped. Each of these loops was custom-designed (form-fitted) to encircle one dental element. The lateral loops were curved in such a way as to conform to the base of each anchor tooth’s crown, with specific fitting done after the false tooth had been set in place and the appliance was ready to be inserted. While the lateral loops were designed to surround the curves of the natural teeth, the central band made to hold the artificial right central incisor (II) is sharply rectangular.

The replacement tooth, probably of ivory or bone, would have been carved to mimic the crown of the tooth that it replaced. The base was cut into a rectangular shape that would be stable in its collar and unlikely to slip. The gold band or collar for this replacement was then attached to the custom-shaped lateral loops by a cold-welding process. Then the lateral bands were fitted to the living teeth by simply pressing the soft (relatively pure) gold band securely around them. Construction of this appliance indicates that it was meant to be a permanent fixture.

DISCUSSION

Etruscan dental appliances were made exclusively for women, as noted above. An even more interesting finding is based on the observation that the teeth commonly replaced by these pontics are central incisors. Etruscan adults frequently lost molars to dental decay after the age of 40, a common feature of their aging pattern. Incisors are rarely lost, however, except in very old age, usually beyond the age of 70 or 75 years. Thus we may infer that certain high-status Etruscan women deliberately had an incisor removed in order to be fitted with a gold band appliance with a replacement, or reused, tooth. Deliberate tooth removal, or dental evulsion, is a cultural

pattern known from many areas in antiquity, including Italy, that survives in many parts of the world today. That this cultural pattern of tooth removal and elaborate replacement with gold fittings was part of the southern Etruscan cultural tradition is strongly indicated by the distribution of these finds as well as the decline in their use as Etruscan cities, writing, and culture were absorbed into the growing Roman empire.

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