



Darenth Roman Villa Osteological report

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Darenth Roman Villa is located near Darenth, a village just south of Dartford, Kent. The Villa was initially discovered in 1894-5 with further excavations having been undertaken in 1969 and 1972.

During works on the site, in 1969, a rectangular cut was identified in the subsoil measuring 2.4m long and 0.9m wide. Within this, the grave was discovered. The presence of iron nails indicated that the individual had originally been inhumed within a coffin although none of the wood survived. The position of the nails indicated that the coffin was approximately 1.7m long, 0.5m wide and 0.2m deep. The grave was located just under 20m east of the Villa building and located just outside of a metalled trackway. The individual was discovered buried prone, on their front, and the grave is reported as containing no grave goods. The original report identifies the grave as originating from the 3rd or 4th century. This is based on the presence of late-Roman material which was identified within a thick deposit of black loam covering the grave.

No further burials were discovered in the area.

Skeletal assessment

A previous publication (Philp 1973) identified the individual as an adult female aged approximately 20-30 years and standing at around 5ft. 5in. in height. Given the date of last assessment, and changes and improvements in methodologies since then, a reassessment of the skeletal remains has been completed. Details of the reassessment were completed using the *Standards for data collection from human skeletal remains* (Buikstra and Ubelaker 1994) with any specific or additional methodologies specified throughout.

It should be noted that when completing an inventory of the skeletal elements present, additional bones have been identified as mixed in with the skeletal material. There are at least an additional three vertebral rib ends as well as some duplicates of metatarsals indicating that elements from at least one another individual have become mixed together with the individual discovered at Darenth Roman Villa.

Grave 1

Preservation and completeness

The completeness of the individual is generally good with greater than 75% survival of skeletal elements. There is a notable absence however of many of the smaller bones from the individual, particularly from the hands and feet, as well as elements such as the patellae and the sternum. There are a number of possible factors that may have contributed to their absence including excavation technique or, given the original date of the excavation, some smaller elements may have been lost over time.

It is also worth noting that most bones have suffered some damage and only a small number of elements survive as complete. This damage includes long bones where most have unfortunately lost either one or both epiphyses, thereby limiting some methods of analysis. Much of this damage already appears visible in the original photograph of the individual in situ and so appears to have been as a result of the positioning of the individual on their front.

Age at death

A commonly used tool for assessing the age at death of an individual is dental wear. The wear of molars was recorded and scored according to both Brothwell (1981) and the updated version by Mays et al (2022). The molars showed very little evidence of wear, with dentine only exposed on the four first molars indicating an age of approximately 17-25 at the time of death.

Due to the young adult age range indicated by tooth wear, an assessment was also made of some of the later fusing epiphyses such as the clavicle and iliac crest. The fusion of the iliac crest generally occurs between the ages of 15-22 (Scheuer and Black 2000, p.365) with the process having always completed by the age of 23. Both the left and right iliac crests of the individual appear to be fully fused. The medial epiphysis of the clavicle had only survived on the left clavicle, and this appeared as fully fused. This is notable as it is largely considered the latest fusing epiphysis within the body. Scheuer and Black (2000, p.251) state that the complete fusion of the medial epiphysis of the clavicle is unlikely to occur before the age of 22 but will always be complete by the age of 30.

In addition to the tooth wear, an assessment was made of cranial suture closure. Sutures were scored according to Buikstra and Ubelaker (1994) with most cranial sutures being either open or minimally closed. Using these scores and the two calculations originally established by Meindl and Lovejoy (1985) the age is estimated to be either 34.7 years \pm 7.8 and 41.1 years \pm 10.0. It should be noted however that the youngest possible age assigned by this method is 30.5.

Based on the methods used above, but with a greater focus on tooth wear and epiphyseal fusion, it is estimated that the individual was likely a young adult (20-35 years) at the time of their death. However, the level of epiphyseal fusion indicates the individual is very unlikely to have been younger than 23.

Sex

The sex of the individual has been estimated using both the skull and the pelvis, however not all features typically scored on the pelvis were available due to damage.

Only two of the five aspects of the pelvis that are typically scored for sexing were available and included the greater sciatic notch and the preauricular sulcus. From these two features, both presented as female.

On the skull, all elements were possible to assess except the left mastoid process which had previously been damaged. Features of the skull were scored as a mix of female and probable female with only the mental eminence being scored as of indeterminate sex.

Based on these scores the individual has been assigned as female.

Stature estimation

Stature estimation of the individual is complicated by the fact that almost all long bones have at least one damaged end limiting the potential for accurate measurements. Only one long bone, the right humerus, was complete enough for measurements. Due to the measurement only being based on a single bone this calculation has a higher margin of error than measurements based on multiple long bones.

Using Trotter and Gleser (1952, 1958) and Trotter (1970) calculations estimate the individual to be between 1.57 and 1.59 meters tall (5ft 2inches).

Dental health

Observations made of both the maxilla and mandible show the individual had generally good dental health. 29 of the 32 teeth were present, with the three missing teeth having been lost post-mortem. There is no evidence of either caries or abscesses and only a small amount of calculus is seen to have built up on the teeth. This indicates that the individual had generally good dental health.

It should be noted however that the absence of calculus may be due to how the skeletal material was initially cleaned. There is some evidence of calculus build-up on the lingual side of the left maxillary second incisor and canine. This suggests that there may have been a larger build-up of calculus which was removed during an initial cleaning; this may also be the case on the other teeth.

Paleopathology and non-pathological conditions

No evidence could be found of any pathological and non-pathological conditions.

Discussion

The assessment performed here has shown that the individual was a young adult female, who stood approximately 1.58m tall. The good dental health and absence of any visible pathological or non-pathological conditions means that there is no evidence of any chronic illness or injury.

The location of the individual close to the Roman villa and the late Roman date suggests that they were likely connected in some way. However, the position of the individual as prone within the grave is of particular interest.

During the Roman period, the exact reason why some individuals were buried prone rather than the more common supine position is unknown but has meant that they are typically referred to as 'deviant'. This term is also used for other irregular burial practices such as decapitated burials, however that does not necessarily mean that the two types of burials have the same motivations. While it is undeniable that in certain contexts there does appear to be a link between the two, for example some Roman cemeteries contain notably high numbers of both such as at Knobb's farm, Cambridgeshire (Wiseman et al. 2021) and Little Keep, Dorchester (Dinwiddy 2009), there is no conclusive evidence for why different types of deviant burials occurred, as is the case with this individual. The usual nature of the burial does however make it of particular interest that warrants potential further study.

References

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