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Human remains from a Roman settlement at Bower Road, Smeeth, Kent

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1 INTRODUCTION

Human bone – cremated and unburnt - from seven contexts was received for analysis. Disarticulated, unburnt human bone was recovered from two contexts; the lower fill of a late 4th century AD pit (242) and a layer (214) overlying the fills of a late 2nd century AD waterhole (372). Cremated bone was recovered from five contexts including the remains of a mid Romano-British urned burial (122). Small quantities (<3g) of cremated bone from other contexts (162, 243, 367 and 462) appears to represent material redeposited in the fills of various early-late Romano-British features including; a waterhole (372), ditches 368 and 461 and pit 242.

2 METHODS

The general methodology followed that set-out in 'Specialist Study Package 6' of the *CTRL Section 1 Project Design* (RLE 2003). Where possible age was assessed using dental attrition patterns (Miles 1962; Brothwell 1981). Sex was ascertained from the sexually diagnostic features of the skeleton (Standards Workshop 1980; Buikstra and Ubelaker 1994).

The cremated bone was analysed according with the standard procedures used for the examination of cremated bone set out in McKinley 1994a, 5-6.

3 RESULTS

A summary of the results are presented in Table 1, details are held in the archive.

Table 1: Summary of results from analysis of human bone.

context	cut	quantification	age/sex	pathology summary
unburnt bone				
214	-	1 frag. (l.)	adult >18 yr. unsexed	
250	242	1 frag. (s.)	adult >18 yr. male	calculus; hypoplasia; ?trauma – cut
cremated bone				
122	107	361g	adult >25yr. unsexed	periosteal new bone – tibia, fibula

3.1 Disturbance and condition

The unburnt bone was clearly redeposited as was the cremated bone from most contexts, only cremation burial 122 represented the remains of an in situ deposit. The urned burial had suffered some disturbance due to plough-damage; the grave surviving to a depth of 0.20 m and the vessel was severely fragmented but complete. It is unlikely that any bone was removed from the vessel as a result of disturbance (bone was not visible in the uppermost fill) but it will have resulted in increased bone fragmentation.

The unburnt bone comprised disarticulated bone fragments – a near complete femoral head (214) and fragments of most of a mandible (250); most edges showed as old breaks, but some of the mandible was broken in excavation. Parts of the femur was slightly eroded but in general the unburnt bone was in good condition and did not appear weathered or abraded, which suggests it was not subject to extensive exposure or repeated disturbance and redeposition. The cremated bone from the burial is slightly chalky in appearance (eroded) and very little trabecular bone was recovered; both largely reflective of the acidic burial environment.

3.2 Demographic data

A minimum number of two individuals – adults, minimum one male - was represented, one by the unburnt disarticulated bone and one by the cremated remains. The disarticulated unburnt bone was located in features c. 40 m apart and may all have derived from the same individual. The features yielding the small quantities of cremated bone were spread across the site (an area c. 112 m by 76 m) and none were in close proximity to the urned burial. Consequently, although some of the very small quantities (maximum 3g) of cremated bone recovered from various features – clearly scatters of redeposited bone – may have derived from the same individual as represented within the cremation burial (e.g. from the pyre site, scattered pyre debris or bone not included in the burial), at least some of it could have originated from the remains of another cremation.

3.3 Pathology

Dental disease

The surviving teeth (12/16) of the mandible (250) had small deposits of dental calculus (mineralised plaque; Hillson 1996, 225); this common condition is generally related to diet and poor oral hygiene. The mandibular canines each had one hypoplastic line - caused by the disruption of the mineralisation process during tooth formation - in the enamel. The aetiology of the condition is multifactoral but is commonly linked with nutritional deficiency or diseases during childhood (Roberts and Manchester 1995, 58).

3.4 Trauma

A cut mark, 6.72mm long and extending through the depth of the bone, was observed on the left angle of the ramus (Plate 1), situated inferio-posteriorly on the middle of the angle (the superior part of the gonion was missing). The colour of the bone at the site of the cut was the same as the surrounding cortical surface and the surviving anterior edge of the cut was polished. This suggests that the cut was made to green not dry bone, but it is not possible to ascertain whether it was made peri- or post-mortem. Such cuts have been observed in cases of decapitation – for which there is relatively common evidence from rural Romano-British

cemeteries (Boylston 2000, 367-8); if such were the case here, the removal was from back to front. In the absence of the whole mandible (the right ramus is missing) and further corroborative evidence, the suggestive cause of the cut can only be viewed as tentative.

3.5 Infections

Thirteen fragments of tibia shaft and nine fragments of fibula shaft from cremation burial 122 had woven periosteal new bone - indicative of a non-specific inflammation of the periosteum - on the cortical surfaces. This type of lesion may be caused by recurrent minor injury to the shin bone as the tibia lies very close to the surface (Roberts and Manchester 1995, 130). Involvement of the fibula may, however, indicate a skin ulcer may cause a chronic inflammation causing a periosteal reaction which may on occasions bridge the gap between the tibia and the fibula (Ortner and Putschar 1981, 131). Alternatively, the infection could have spread from a foci elsewhere in the body via the blood stream (Manchester 1983, 37).

3.6 Pyre technology and cremation ritual

The cremated bone was generally white in colour indicative of full oxidation (Holden et al 1995a and b; McKinley 2000, 40) with only slight blue/grey colour variations in a few cranial fragments. Similar low weights to that recovered from burial 122 have also been recorded from Westhampnett, West Sussex (McKinley 1997, 250). This may largely be due to bone loss from the burial as a result of disturbance and the potential loss of trabecular bone in the acid soil condition. The majority of the bone (58%) from the burial was recovered from the 5mm sieve fraction and the maximum surviving bone fragment was relatively small at c. 33mm. A number of factors may affect the level of fragmentation to cremation bone (McKinley 1994b), in this instance the soil acidity is likely to have been a major factor resulting in small fragment size. Elements from all skeletal areas were represented in the burial; the small quantity of fragments from the axial skeleton is more representative of the loss of bone due to soil acidity than to there deliberate exclusion (see above) and the relatively high proportion of cranial fragments is due to the ease of identification. There was no apparent preference in skeletal elements included in the burial.

The 3g of cremated bone from 367 included a fragment of animal rib. The bone within this deposit may have derived from a disturbed burial, or represent redeposited pyre debris and could have originated from the same cremation as the bone within burial 122. Whatever, the animal bone is likely to represent the remains of pyre goods.

Fragments of three iron nail fragments were recovered by the osteologist from burial 122 and iron staining was observed on two fragments of bone. The nails may have derived from pyre goods, mortuary furniture or the fuel used to build the pyre.

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