Channel Tunnel Rail Link

London and Continental Railways

Oxford Wessex Archaeology Joint Venture

Human remains from Tutt Hill, Westwell, Kent

by Annesofie Witkin

CTRL Specialist Report Series

2006

TABLE OF CONTENTS

LIST OF TABLES

1 INTRODUCTION

Cremated human bone from eleven contexts – seven deposits – was received for analysis. The burnt bone was recovered from a mid to late Bronze Age possibly urned burial (47) and one undated unurned burial (45). Small quantities (<7g) of cremated bone from contexts 24, 48, 71, 72, 99, 270, 271, 272 and 298, appears to represent deposits of redeposited pyre debris, redeposited cremated remains or cremation related deposits which are either undated (24, 271 and 272) or dated to the mid-late Bronze Age (48, 99 and 298). One pit (70) is also dated to the late Iron Age - early Romano-British period. All deposits are from pits.

2 METHODS

The general methodology followed that set-out in 'Specialist Study Package 6' of the *CTRL Section 1 Project Design* (RLE 2003). 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	deposit type	quantification	age/sex
24	23	Redeposited cremated remains	> 1 g	unknown, unkonwn
45	44	Unurned cremation burial	282 g	adult >18 yr. unsexed
47	46	Urned? cremation burial	1288 g	adult > 18 yr. male
48	46	Redeposited pyre debris	4 g	adult > 18 yr. male
71	70	Cremation related deposit	1 g	unknown, unknown
72	70	Cremation related deposit	3 g	unknown. unknown
99	98	Cremation related deposit	6 g	unknown, unknown
270	269	Cremation related deposit	1 g	unknown, unknown
271	269	Cremation related deposit	2 g	unknown, unknown
272	269	Cremation related deposit	1 g	unknown, unknown
298	301	Redeposited pyre debris	7 g	unknown, unknown

Disturbance and condition

Only two contexts definitely represented cremation burials (45 and 47 + 50) with the remains of in situ deposits. Both had suffered substantial disturbance due to animal actions, ploughing and vandalism. Bone was visible on the surfaces and it is likely that bone was removed from

both of the features, especially context 45, since this feature was only 0.07 m deep. The disturbance would also have caused an increase in bone fragmentation.

The cremated bone deposits 24, 71, 72, 99, 270, 271 and 298 were all heavily truncated and/or disturbed by animal action resulting in the loss of bone from the features. The cremated bone from the features is slightly chalky in appearance (eroded) and very little trabecular bone was recovered; both largely reflective of the acidic burial environment.

Demographic data

A minimum number of two individuals – adults, minimum one male - was represented by the unurned and the urned cremation burial.

The pits yielding the small quantities of cremated bone were mainly situated around the western and southern edges of an area with ring ditches. The area measured 80 m by 25 m and the features were in relatively close proximity to the urned (47) and the unurned (45) cremation burials. Due to the truncated and/or heavily disturbed nature of these deposits, it is not possible to ascertain whether these are remnants of unurned cremations and/or represents redeposited pyre debris. Consequently, these do not form part of the total number of individuals represented by the cremated remains.

The small quantity of cremated bone (< 1g) recovered from context 24, a possible post hole, was clearly redeposited and is likely to have originated from the remains of another cremation burial.

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). However, black and white cranial fragments and numerous small unidentified black fragments were located within cremation burial 47. Similar low weights to that recovered from burial 45 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 (51%) from the burial was recovered from the 5mm sieve fraction and the maximum surviving bone fragment was reasonably large at *c*. 56mm.

Cremation burial 47 contained a substantial amount of bone (1288 g), though a relatively small proportion of the identified bone fragments was from the axial skeleton (12%). The largest fragment measured *c*. 73mm though about 55% of the bone was recovered from the 5mm fraction.

A number of factors may affect the level of fragmentation to cremation bone (McKinley 1994b), in this instance the soil acidity, and the disturbance of the deposits are likely to have been major factors 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.

Four small fragments of burnt animal bone was recovered from cremation 47. The animal bone is likely to represent the remains of pyre goods.

One cranial vault fragment and three unidentifiable fragments with turquoise staining was observed by the osteologist from burial 45. These stains are likely to have derived from pyre goods.

4 BIBLIOGRAPHY

Buikstra, J E and Ubelaker, D H 1994 Standards for data collection from human skeletal remains, Arkansas

Holden, J L Phakley, P P and Clement, J G 1995a Scanning electron microscope observations of incinerated human femoral bone: a case study. Forensic Science International **74**, 17-28

Holden, J L, Phakley, P P and Clement, J G 1995b Scanning electron microscope observations of heat-treated human bone. Forensic Science International **74**, 29-45

McKinley, J 1994a The Anglo-Saxon cemetery at Spong Hill, North Elmham, part VIII: The cremations. East Anglian Archaeology. Report number **69**

McKinley, J 1994b Bone fragment size in British cremation burials and its implications for pyre technology and ritual. Journal of Archaeological Science **21**, 339-342

McKinley, J 1997 The cremated human bone from burial and cremation related contexts. In A.P. Fizpatrick (ed.) Archaeological excavations on the route of the A27 Westhampnett bypass, west Sussex, 1992. Volume 2: the cemeteries 55-73.

McKinley, J 2000 The analysis of cremated bone in M. Cox and S. Mays (eds.) Human osteology in archaeology and forensic science, London 403-421

Workshop of European Anthropologists 1980 Recommendations for age and sex diagnoses of skeletons, Journal of Human Evolution **9**, 517-49