

# ANCIENT MONUMENTS LABORATORY

## REPORT

3517

**SERIES/No**

CONTRACTOR

**AUTHOR**

Janet D Henderson

May 1981

**TITLE**

Human Bone report - Magiovinium  
Site 18

Human Bone Report - Magiovinium Site 18

A M Lab Nos: Various

Janet D Henderson

Period: Romano-British

Institute of Archaeology

May 1981

The Inhumed Bone

The inhumed bone from Site 18 constituted too small a sample for detailed analysis, therefore a simple list of the results for each find is given below.

313. Lab No 779828

This was a left femur from a human foetus aged approximately  $9\frac{1}{2}$  lunar months (38 weeks - age was assessed on the maximum length of the bone and infant stature).

513. Lab No 779876

This was a small sample of infant human bone comprising most of the skull but none of the post-cranial skeleton. The teeth, tympanic ring and unfused mandibular symphysis suggested that this individual died early in the postnatal period (but not "at birth") and it was aged between birth and 6 months accordingly.

218. Lab No 779777

This sample of human bone comprised parts of the lower extremities: both femora, right tibia, left tibia, left fibula, right talus and calcaneus, a first metatarsal and a first phalanx. The bone was rather fragmentary and came from an adult individual (epiphyseal union was complete) probably a male (on bone size). No further observations could be made.

The Cremations

Twenty-four numbered samples of cremated human bone were presented for examination. One of these (66) was found to contain the remains of more than one individual (an adult and a juvenile were present) but in none of

the others was there any evidence for the presence of more than one body.

The condition of the bone was very variable in that sample sizes ranged from as little as 3g (281) to 885g (539). It should be noted that the average weight of the cremated skeleton is 1.6kg (Evans 1963), therefore none of the samples recorded here can be considered truly representative of individuals.

The maximum sizes of the fragments ranged from less than 1cm to more than 10cm. Since bone does not actually burn but rather shrinks and splits it is suggested that this small size may be attributable to post-cremation break-up of the bone (a common practice to facilitate the inclusion of material in a cremation urn).

The extreme differences in the sample sizes was also reflected in the bones that could be individually identified. In the larger cremations it was generally possible to observe most parts of the skeleton including: skull teeth, long bones (both shafts and articular surfaces), ribs, vertebrae, fragments of pelvis and scapula and bones from the hands and feet. At the opposite end of the scale 242 could be identified merely as human and in other small samples skull and long bone fragments only could usually be extracted. There was no obvious bias towards any one area or bone but owing to the small sample size it was not possible to confirm this.

Most of the bone was white in colour with a small proportion of blue-grey. One or two bones were black but it is likely that this was caused either by charcoal or by post-burial staining in the ground. (If this is not the case then the black is indicative of a low level of burning - burnt bone goes through a variety of colours before eventually becoming white.) Blue-grey in the bone indicates incomplete burning and the continued presence of organic matter. Thus its presence in the Magiovinium cremations suggests that the cremation process was insufficient completely to burn all the bone.

(To cremate a body fully on an open pyre probably would involve a lengthy period of time or an artificial method of increasing the intensity of the fire (see Wells 1960).)

Obviously with such small samples available detailed analysis of the individuals present was not feasible, however it was possible to establish some information on the age and sex of some of the cremations and also to make one or two observations with regard to pathology.

Seventeen of the cremations could be tentatively aged. All of these were adults with the exception of the juvenile in 66. On 290 and 539 it may be suggested that the individuals were older than 30 years, but on none of the other cremations was a more precise estimate than "adult" possible.

Sex could be assessed on one individual only. 67 was probably a female on the basis of the extremely small observed size of the bones and the width of the humeral medial epicondyle (4.9cm).

There was very little evidence for any pathology or abnormality but on 45 some vertebral osteophytosis was recorded and one of the vertebrae showed some signs of osteoarthritis. On 290 there was some osteoarthritis on the cervical vertebrae. On neither of these individuals was it possible to make an analysis of the significance of the condition observed without further information than was available.

Examination of the cremations as parts of different burial groups (660, 661 and 662) did not show any significant differences between them other than the size of the samples. Thus cremation burial group 662 was where all the very small samples were to be found. However it is probable that this was more a feature of post-burial erosion and destruction than of the burial practice itself.

Comparison of the cremations from sites 17 and 18 showed that in most respects they were very similar and no obvious significant differences were found.

#### Acknowledgements

I should like to thank Guy Grainger for details on the following cremation burials: 66, 70, 68, 35, 242, 246, 250, 261, 256, 257, 265, 269, 273, 277, 281, 285, 290.

#### References Mentioned in The Text

Evans, W.E.D: The Chemistry of Death. Charles C. Thomas, Illinois. 1963.  
Wells, C: A Study of Cremation. Antiquity 34. 29-37. 1960.