

ANCIENT MONUMENTS LABORATORY

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TITLE

Six skeletons from St.
Augustine's Abbey, Canterbury

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Six skeletons fairly well preserved were submitted for examination. Age at death was estimated from dental wear⁽¹⁾ for adults and tooth eruption⁽³⁾ and epiphyseal fusion ^(1,2) for juveniles and the immature adult.

Burial 549

The remains were those of a juvenile aged about 11-12. The teeth showed slight calculus deposits and the anterior mandibular teeth were crowded.

The dental formula was:-

$$\begin{array}{cccccccc|cccccccc} \text{—} & \cancel{1} & 6 & 5 & 4 & (3) & 2 & 1 & & 1 & 2 & (3) & 4 & e & 6 & 7 & \text{—} \\ \hline (8) & (7) & 6 & e & d & (3) & 2 & 1 & & 1 & 2 & (3) & d & e & 6 & (7) & (8) \end{array}$$

The skull was metopic and of a slightly unusual shape, the vault being rather compressed in the basio-bregmatic dimension and cubical in appearance.

These effects were exaggerated by the post mortem distortion it had undergone but probably only represent an extreme case in the range of normal variation.

Burial 557

The bones were those of a mature adult, probably female and in the age range 35-45. Maximum stature calculated from the formulae of Trotter and Gleser ⁽⁴⁾ was 159 cm (c. 5'2½"). The skull was metopic and, although the sutures were mostly obliterated, three lambdoid wormian bones and one parietal notch bone on the left-hand side were noted. Measurements are given in table 1.

The teeth showed very slight traces of hypoplasia, slight calculus deposits and slight to medium signs of periodontal disease. The dental formula was:-

$$\begin{array}{cccccccc|cccccccc} \text{NP} & & \text{E} & & & & & & & & & & & & & & \text{NP} \\ & & \text{A} & & & & & & & & & & & & & & \\ 8 & \cancel{X} & 6 & 5 & \cancel{X} & 3 & 2 & 1 & & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ \hline 8 & 7 & 6 & 5 & 4 & 3 & 2 & 1 & & 1 & 2 & 3 & \cancel{X} & 5 & \cancel{X} & 7 & 8 \\ \text{NPLCLC} & & & & & & & & & & & & \text{DC} & & \text{NP} \\ & & \text{MC} & & & & & & & & & & & & & \end{array}$$

There were slight traces of osteo-arthritis (degenerative joint disease) at all the arm joints, including the wrist and fingers. The legs were apparently unaffected. Some of the rib cartilage had ossified. These changes are normal in an individual of this age.

Burial 574

These were the remains of a juvenile aged over seven and probably under twelve. A more precise age at death was impossible to estimate as no skull or teeth were submitted for examination.

Burial 577

These were the remains of a juvenile aged 3 - 5 years.

Burial 580

The bones were those of an infant aged 0 - 2 months. Long bone measurements are given in table 2. They are all maximum lengths. Il \longleftrightarrow is measured from the posterior to the anterior superior iliac spine and Il \updownarrow from the iliac crest to the acetabulum.

Burial 581

These were the remains of an immature adult, probably male, aged 17 - 20. The teeth showed no signs of decay but there were slight calculus deposits on all of them and medium deposits on the anterior mandibular teeth. The skull had an inca bone and four small wormian bones in the lambdoid suture. It was too fragmented and warped to reconstruct but a few measurements were possible (see table 1).

An approximate maximum stature of 175 cm (5'9") was calculated, but this would not be very accurate as many of the long bone epiphyses were unfused. The right tibia and humerus showed considerable signs of periosteal bone deposition. This could be associated with some soft tissue infection or

perhaps with bone deposition connected with the fusion of the epiphyses.

One intrusive bone fragment, a distal femoral epiphysis from a juvenile, was also noted.

Key to dental formulae:-

— = area missing	NP = not present, congenitally missing
X = tooth lost ante mortem	E = pulp cavity exposed
/ = tooth lost post mortem	A = abscess
○ = tooth erupting	DC = distal caries
U = tooth unerupted	MC = mesial "
	LC = labial "

Table 1: Skull Measurements (in mm)

<u>Measurement*</u>	<u>Burial</u>	<u>Burial</u>
	<u>557</u>	<u>581</u>
L	135	
B	146	
B'	99.7	
H'	135	
LB	101	
S1	140	122
Si	113.1	109.3
Bib	113.2	
G'H	71.5	
GL	92.3	
GB	90.5	
G2		35.5
G1	42.4	45.8
O1	36.7	
O2	30.7	
NB	23.5	24.4
NH'	53.1	
SC	6.9	
DC	22.4	
W1	112.0	
ZZ	42.4	45.8
RB	34.0	
H1	39.0	
M2H	28.9	28.3
CH	63.2	
CyL	18.0	
ML	102 $\frac{1}{2}$	
MZ	116 $\frac{1}{2}$	
RL	63 $\frac{1}{2}$	

* Measurements are defined in Brothwell (1972)

Table 2: Juvenile and Infant long bone measurements (without epiphyses)

	Burial 549	Burial 574	Burial 580
Humerus R		272	63.2
L		268	63.1
Radius R		202	50.9
L		200	50.1
Ulna R			58.0
L			57.7
Femur R	346	381	71.0
L	348	384	71.5
Tibia R	288	300	63.4
L	288		63.8
Fibula	283	296	60.6
Il ↔ R			33.9
L			34.4
Il ↓ R			31.0
L			31.3
Clavicle R			43.0
L			42.8

Measurements in mm.

References

1. Brothwell, D.R. (1972) Digging up bones
2. Lockhart, R.D et al (1959) Anatomy of the human body p142-3
3. McCall, J.C. and Wald, S.S. (1963) Clinical Dental Roentgenology p 149,157
4. Trotter, M. and Gleser, G.C. (1955) Amer J Phys Anthropol 16, 79-123