

Long Bredy: Human Bone Report

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Bones from 3 burials and a number of bone groups were examined. Their condition varied from good to very poor with varying degrees of surface erosion, distortion and fragmentation, even within one burial.

The age at death was calculated on the basis of tooth eruption (3) for the immature individuals and on dental wear (1) for the adults.

Burial 1

The bones were the remains of an adult male, aged about 20-30. Preservation was generally good although there was some surface erosion. The maximum stature was estimated to be 175 cm (c. 5 ft 9 ins) from the formulae of Trotter and Gleser(4). The skull measurements are given in table 1.

The dental formula was:-

oc
8 7 6 5 4 3 2 1 | 1 2 3 4 5 6 7 8
8 7 6 5 4 3 2 1 | 1 2 3 4 5 6 7 8
oc oc

Insert key to dental formula from p. 4. →

There were slight green calculus deposits on most of the teeth which also showed a medium degree of hypoplasia. The anterior mandibular teeth had been chipped in antiquity, possibly even before death.

There were slight traces of torus mandibularis on the right side. The lambdoid suture contained 8 wormian bones, including 2 large ones at lambda.

The right-hand side of the fifth lumbar vertebra showed spondylolysis (non-fusion of the vertebral arch to the vertebral body), a congenital condition. There were also small pits in the articular surfaces of some of the vertebral bodies in the lumbar portion of the spine. These did not appear to be Schmorl's nodes (see below) although they may be of a similar degenerative type. There was slight osteo-arthritic lipping on a few ribs, one thumb, the pelvis and some of the vertebrae.

The animal bone fragments were from hare, sheep and cattle.

Table 1: Skull Measurements for Burial 1 (in mm)

L	-	183
B	-	149
B'	-	103
S ₁	-	129
S' ₁	-	114
Bib	-	118.9
J	-	140.2

ZZ	- 40.6
RB	- 32.0
H ₁	- 33.3
M ₂ H	- 24.5
CH	- 70.4
CyL	- 20.3

For definitions of measurements see Brothwell (1972).

Burial 2

This burial was more muddled, with fragments of 2 juveniles of different ages mixed in with it. The individual whose bones comprised the bulk of the burial was a male aged 35-45. The bones were generally in a very poor condition, being eroded, distorted and fragmentary.

The skull was metopic and had at least 6 wormian bones in the lambdoid suture, including one at lambda. The teeth, which had slight calculus deposits and showed slight signs of periodontal disease, also displayed overbite. The dental formula was:-

NP	OC		E A MC														
8	7	6	5	4	3	2	1		1	2	3	4	5	6	—		
8	7	6	5	4	3	2	1		1	2	3	4	5	6	7	8	
MC DC																OC	
LC																	

There were medium signs of osteo-arthritis throughout the skeleton but the cervical part of the spine was far more severely affected, with C3 and C4 actually fused by the bony deposits. There were Schmorl's nodes in the lumbar vertebrae. These pits are caused by a normal but genetically linked degeneration leading to herniation of the inter-vertebral disc material.

Burial 3

These bones were mainly those of a juvenile aged 10±1 years. Three other individuals were also represented. They were the adult from burial 2, a juvenile aged 5±1 years and another adult, represented by just 3 teeth. Judging by their size this individual was possibly female. The juvenile bones found in burial 2 were parts of the 2 juveniles represented in Burial 3.

The bones of the juvenile aged 10±1 years were in a fairly good state of preservation with most parts of the body represented. No pathological changes were noted but 3 of the cervical vertebrae, C4, C5 and C6, had double foramina transversaria on the left side.

Bones from near Burial 1

There were 3 fragments of leg bones from a largish adult. They do not belong to Burial 1 but could be part of Burial 2. There was also one lumbar vertebra from an immature individual, possibly from Burial 3.

Bones from near Burial 3

These bones were mainly from a juvenile aged 5 ± 1 years, almost certainly the one represented in Burials 2 and 3. There were also a few fragments of a younger individual aged about 2 ± 1 years and a few fragments of an adult, possibly the one represented by the 3 teeth in Burial 3.

Bones from the Central Cairn

This was a very mixed collection of fragments. There were a number of adult bones, some of which belonged to burial 2 and some of which did not. There were also immature bones belonging to one or both of the 2 juveniles and fragments from an infant aged 2 ± 1 years, probably the one represented in the bones from near Burial 3.

Cremated bone from the Central Cairn

These fragments were poorly calcined. They were mainly skull fragments with some small pieces from long bones. They were from an adult individual.

Summary

The bones examined were parts of at least 6 individuals. The table below shows which burials contained which individuals eg Burial 2 was mainly a male aged 35-45 but also included fragments of 2 juveniles. Note that the column labelled "Adult" may represent more than one individual.

Table 2: Summary

	Male 20-30	Male 35-45	"Adult"	Juvenile 10 ± 1	Juvenile 5 ± 1	Infant 2 ± 1
Burial 1	main					
Burial 2		main		frags	frags	
Burial 3		frags	frags	main	frags	
Bones near Burial 1		?frags		?frag		
Bones near Burial 3			frags		main	frags
Central Cairn		frags	frags	frags	frags	frags

References

- 1 Brothwell, D R (1972) Digging up bones.
- 2 Davies, P M (1969) Medical terminology in Hospital Practice.
- 3 McCall, J O and Wald, SS (1963) Clinical Dental Roentgenology (149, 157).
- 4 Trotter, M and Gleser, G C (1958) Amer J Phys Anthropol 15 (79-123).

Key to dental formulae

/ = lost post mortem	NP = not present; congenitally absent
- = tooth only, no jaw	OC = occlusal caries
— = area missing	MC = medial caries
E = Pulp cavity exposed	DC = distal caries
A = Abscess	LC = labial caries