

Ancient Monuments Laboratory  
Report 238/87

A SKELETON FROM THE JUBILEE HALL,  
COVENT GARDEN.

Janet D Henderson (MA) Hons (Cantab)

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#### Summary

An examination was made of the human bones from an inhumation burial. The remains were of an adult male individual and the most notable find was a fracture of the right ulna. There was no evidence on the bone to substantiate the suggestion that the hands had been tied at the back (the burial was prone).

Author's address :-

Ancient Monuments Laboratory  
Historic Buildings & Monuments Laboratory  
23 Savile Row  
London  
W1X 2HE

01 734 6010

### A Skeleton from the Jubilee Hall, Covent Garden

Examination of the human skeletal remains from this burial showed that most of the bones of the skeleton were represented but that preservation was only poor-fair. Observations were made for age, sex, stature and any skeletal anomalies or abnormalities. A complete catalogue of these results is attached and a full archive inventory of the bones and teeth present is kept in the Ancient Monuments Laboratory.

The skeleton was that of an adult male (aged approximately 35-40 years). Stature was estimated at 1.72 m (c.5'8").

With the exception of the presence of an os trigonum (accessory bone) on the right foot no unusual metrical or morphological anomalies were found.

Evidence for pathological change was noted on the teeth, the vertebrae and the right ulna. Orally there was a carious lesion affecting the maxillary right first molar. In addition there was marked bony recession of the alveolar margins which is generally taken to indicate some form of gingivitis (gum disease) during life. On the spine the evidence was all for joint disease. Only the cervical and thoracic vertebrae were sufficiently complete for examination but it was possible to establish that only the vertebral bodies were affected (i.e. not the posterior joints) and that the presence of marginal osteophytes and Schmorl's nodes suggested that there had been some intervertebral discal degeneration. This was not considered to be of any great significance since such changes are common and may occur as early as the second decade of life (Resnick and Niwayama, 1981). Finally there was a fracture of the right ulna (see Plate, for detailed description see Catalogue). This kind of injury is often described as a 'parry' fracture since it is often caused by parrying a blow with the forearm. However it may also result from an indirect force, such as a fall on the hand, so it should not automatically be assumed that it represents violence (Adams 1978). The bony and radiographic evidence suggested that the fragments had united and were partially consolidated both generally taken to be indicators of healing (Watson-Jones, 1946).

The position of the body in the grave (prone) was of some interest, particularly since the arms seemed to be pushed to one side. This raised the possibility that the arms had been tied together prior to burial. Both bones and site photographs were examined but although it was clear that the arms were resting to one side of the body (the right) there was no evidence either on the skeleton or on the photographs to suggest that this had been deliberate.



Healed fracture of the right ulna

## Human Bone Catalogue

Partial skeleton in variable condition (poor-fair) with many of the long bones showing damage to the bone surface. All parts represented (the skeleton was approximately 90% complete).

Sex: Male, based on pelvic and skull morphology, femoral size and the overall robustness of the bones (see Henderson (1984) for references).

Age: 35-40 years, based on wear of the occlusal surfaces of the teeth (Brothwell, 1981).

Stature: 1.72 m +/- .0879, c.5'8".

Estimate based on Steele's method (1970), using the average of the lengths of the femur, segment 1.

### Dental Pathology

Caries: Medium-sized lesion on the mesial surface of 1,6 at the level of the cemento-enamel junction.

Periodontal Disease: Marked recession of the alveolar margins

### Skeletal Pathology

#### Joint Disease

Spine: Present: C1-6, T1-12, L1-2, L5, Sacrum very fragmentary

Note: Lumbar vertebrae too fragmentary for assessment

Atlanto-axial Joint: Changes absent

Apophyseal Joints: Changes absent

Costovertebral Joints: Changes absent

Vertebral Bodies: Slight development of marginal osteophytes affecting the superior and inferior borders of T9 and T10. T11 affected at the superior edge only. Schmorl's nodes present at the following surfaces: T6 - inferior  
T8 - superior and inferior  
T10 - inferior  
T11 - superior

Comment: Evidence for joint disease was very scanty on this individual, a finding that would, in general, be expected in an individual of this age. Changes, such as those noted here, have been described as early as the second decade of life, and may be considered as part of the normal ageing process of the skeleton rather than indicative of a specific arthritic condition.

#### Trauma

Right ulna: There was a large, bony 'swelling' encompassing the whole of the shaft in the distal third. The affected area was approximately 45 mm long and located approximately 170 mm from the proximal extremity of the bone (measured to its most proximal point). There was no evidence for infection. Radiographic examination showed that there had been a transverse fracture of the bone with minimal displacement of the bone fragments. The 'swelling' was the bony callus which had formed round the fracture site as part of the healing process. There was clear radiological evidence for union of the fracture, with a bridge of bony callus joining the fragments (Watson-Jones, 1946). The criteria for consolidation were not fulfilled in that neither was the callus more dense than the normal bone, nor, apparently, had any of the external callus been absorbed. However there were continuous striae across the fracture site which suggests that consolidation was in progress at least (ibid.) The right radius had not been involved.

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### Skull Metrics

Number	L	B	H'	LB	GL	B'	S1'	S2'	S3'	BiB	FL	J	G'H	GB	O2	O1'	NH'	NB	SC	MAL	MAB
1	-	-	-	-	-	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### Index of Abbreviations

L: Maximum length  
B: Maximum breadth  
H': Basion-bregmatic height  
LB: Basion-nasion length  
GL: Basion-alveolare length  
B': Minimum frontal breadth  
S1': Frontal chord  
S2': Parietal chord  
S3': Occipital chord  
BiB: Biasterionic breadth  
FL: Foramen magnum length  
J: Bizygomatic breadth  
G'H: Upper facial height  
GB: Facial breadth  
O2: Orbital height  
O1': Orbital breadth  
NH': Nasal height  
NB: Nasal breadth  
MAB: Maxillo-alveolar breadth  
MAL: Maxillo-alveolar length

### Mandible Metrics

Number	H1	ML	GoGo	W1	CrH Right/Left	CyL Right/Left	RB' Right/Left	ZZ	M2H Right/Left	M2B Right/Left
1	41	-	-	-	- 69	- -	- 32	-	- 29	- 16

### Index of Abbreviations

Note: All measurements are given in millimetres (mm)

H1: Symphyseal height

ML: Condyle-symphyseal length

GoGo: Bigonial diameter

W1: Bicondylar width

CrH: Height of ascending ramus

RB': Minimum ramus breadth

M1/2: Body height at M1/2

M2: Body thickness at M2



### Cranial Morphology

Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		R/L		R/L		R/L		R/L		R/L	R/L		R/L	R/L	R/L	R/L	R/L
1	0	1/1	-	-/-	-	-/-	-	-/-	-	-/-	0/0	-	-/-	-/-	-/-	-/-	-/-

### Index of Abbreviations

R = Right

L = Left

The following are all scored on an absent (0), present (1) basis, except where otherwise stated.

1. Metopism
2. Supra-orbital foramen (1 = notch, 2 = foramen, 3 = notch + foramen, 4 = other)
3. Bregmatic Bone
4. Coronal suture - wormian bones (1...x denotes number of bones present)
5. Sagittal suture - wormian bones (1...x denotes number of bones present)
6. Parietal Foramina
7. Wormian bone at lambda
8. Lambdoid suture - wormian bones (1...x denotes number of bones present)
9. Os Inca
10. Mastoid foramen
11. Torus maxillaris
12. Torus palatinus
13. Occipito-temporal suture - wormian bones (1...x denotes number of bones present)
14. Asterionic bone
15. Os japonicum
16. Parietal notch bone (1 = notch, 2 = parietal notch bone present)
17. Pterion Form (1 = H-shaped, 2 = K-shaped, 3 = X-shaped articulation)

<u>Mandible</u>	<u>Morphology</u>		
Number	1	2	3
	R/L	R/L	R/L
1	-/0	0/0	-/1

#### Index of Abbreviations

R = Right

L = Left

The following are scored on an absent (0), present (1) basis, except where otherwise stated.

1. Mylo-hyoid groove (1 = spur, 2 = bridge)
2. Mandibular Torus
3. Gonial Eversion (1...x denotes increasing severity)

(1) and (2) of the above are scored on an absent (0), present (1) basis.

(3) is scored by degree of severity: 1.....x

### Upper Extremity Metrics

Number	ClL1		HuL1		HHD		HuE1		RaL1		U1L1	
	Right/Left		Right/Left		Right/Left		Right/Left		Right/Left		Right/Left	
1	155	-	-	-	-	-	65	67	-	-	-	-

### Index of Abbreviations

Note: All measurements are given in millimetres (mm)

ClL1: Clavicle - Maximum length

HuL1: Humerus - Maximum length

HHD: Humerus - Maximum head diameter

HuD1: Humerus - Maximum diameter at the mid-shaft

HuD2: Humerus - Minimum diameter at the mid-shaft

HuE1: Humerus - Epicondylar breadth

RaL1: Radius - Maximum length

RHD: Radius - Maximum head diameter

U1L1: Ulna - Maximum length

### Femoral Metrics

Number	FeL1 Right/Left		FeL2 Right/Left		FHD1 Right/Left		FeD1 Right/Left		FeD2 Right/Left		FeD3 Right/Left		FeD4 Right/Left		FeE1 Right/Left	
1	-	-	-	-	50	51	28	28	34	33	-	-	-	-	-	-

### Index of Abbreviations

Note: All measurements are given in millimetres (mm)

FeL1: Maximum length

FeL2: Oblique length

FHD1: Maximum head diameter

FeD1: Sub-trochanteric antero-posterior diameter

FeD2: Sub-trochanteric medio-lateral diameter

FeD3: Mid-shaft antero-posterior diameter

FeD4: Mid-shaft medio-lateral diameter

FeE1: Bicondylar breadth

### Axial and Upper Extremity Morphology

Number	Sternum		Scapula		Vertebrae					Humerus	
	1	2	1	2	1	2	3	4	5	1	2
			R/L	R/L	R/L	R/L		R/L		R/L	R/L
1	-	-	0/-	2/-	0/0	0/0	-	-/-	-	0/0	0/0

### Index of Abbreviations

R = Right

L = Left

The following are all scored on an absent (0), present (1) basis, except where otherwise stated.

#### Sternum

1. Manubrio-corpae synostosis
2. Sternal aperture

#### Scapula

1. Os acromiale
2. Suprascapular area (1 = straight, 2 = notch, 3 = deep notch, 4 = foramen)

#### Vertebrae

1. Atlas - posterior bridge (1 = spur, 2 = bridge)
2. Atlas - lateral bridge (1 = spur, 2 = bridge)
3. Level of open sacral hiatus (eg. S3 = open to the level of the 3rd sacral vertebra)
4. Accessory sacral/iliac facets
5. Lumbo-sacralisation of a vertebra

#### Humerus

1. Septal aperture
2. Supracondylar process

### Lower Extremity Morphology

Number	Femur			Patella		Tibia	Talus		Calcaneus
	1	2	3	1	2	1	1	2	1
	R/L	R/L	R/L	R/L	R/L	R/L	R/L	R/L	R/L
1	0/0	-/-	-/-	0/0	0/0	0/-	0/0	2/2	1/1

### Index of Abbreviations

R = Right

L = Left

The following are all scored on an absent (0), present (1) basis, except where otherwise stated.

#### Femur

1. Third trochanter
2. Allen's fossa
3. Poirier's facet or plaque (1 = facet, 2 = plaque)

#### Patella

1. Vastus notch
2. Bipartite patella

#### Tibia

1. Squatting facets (tibia and talus)

#### Talus

1. Os trigonum
2. Shape of talar facet (1 = single, 2 = double)

#### Calcaneus

1. Calcaneal facet - shape (1 = single, 2 = waisted, 3 = double)