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The Human Bones from Wenlock Priory, Salop

The human bones from nine burials were examined in the laboratory; the minimum number of individuals was estimated at nine. Two of the burials were only small collections of human bone from which it was possible to extract only a limited amount of information. Bone preservation was generally quite good with many of the skeletons being well represented and with well preserved surfaces.

Observations were made for demography (age, sex and stature), anthropology (metrical and morphological variables) and pathology. The results by individual for bone preservation, sex, age, stature and pathology are given in the catalogue (attached) together with the methods which produced these results. The information on the anthropology was kept in the archive as it was not considered justifiable to comment on the small number of observations made. The results are summarised in Table 1.

Demographic Results

The results showed that there were two females, one probable female, and three adults of indeterminable sex. Of the adults one was aged 16-20 years, one at 25-35 years, one at 35-45 years, one middle-aged, one mid-old age and four adults who could not be aged more precisely.

Stature was estimated on only four individuals which was not enough for a statistical analysis, but it was interesting to note that one of the individuals, Burial 35 (male, 35-45 years) had a stature of only 1.57m (5'1½").

Pathological Results

Dental

Three individuals had periodontal disease (Burials 35, 53 and 59) and five had both the deposition of calculus and enamel hypoplasia (35, 53, 57, 58 and 59). Burial 35 had small caries on the distal surface of the left maxillary second molar and on the mesial surface of the right maxillary first molar. There were also two large abscesses by the left maxillary first molar, a large one on the apex of the root at the lingual side, and a smaller one at the apex of the root on the buccal side. The caries on the distal surface of the left maxillary second molar was probably associated with the infection from these abscesses.

Burial 53 had small caries on the right mandibular second and third molars and Burial 59 had four small caries on the occlusal surfaces of the left mandibular first and second molars and the right maxillary first molar, and on the mesial surface of the right maxillary first premolar.

Skeletal

Some skeletal pathology was noted and described, but usually there was no further comment possible.

There were two small button osteomas on the external surface of two skull fragments and also one on the internal surface of a separate skull fragment from Burial 58 (female, middle-aged).

There were several cases of degenerative joint disease in this population. The development of slight marginal osteophytes only, was seen in Burial 35 (male, 35-45 years) on all the joints of the long bones and the intervertebral facets and bodies of most of the vertebrae. Only marginal osteophytes also occurred in Burial 68 (probably female, adult) on two rib facets and on the left acetabulum, and on Burial 59 (male, mid-old age) on the articular surfaces of the long bones of all the major joints.

Slight porosity of the bony surfaces of the vertebral bodies with the development of osteophytes was seen in Burial58 (female, middle-aged) on the fifth cervical vertebra, on two separate thoracic bodies, on the fourth and fifth lumbar vertebrae and on the first sacral vertebra.

Slight osteophytes at the bony margins with the destruction of the surfaces of the vertebral bodies in the area of the annulus fibrosus occurred in Burial 53 (male, 25-35 years) on three separate thoracic vertebral bodies. This individual also had depressions on the inferior and superior surfaces of the lumbar vertebral bodies.

Burial 59 had slight osteophytic lipping of most of the vertebral bodies, and eburnation and destruction of the intervertebral facets of a large number of the vertebrae and also the right inferior intervertebral facet of the second cervical vertebra was fused to the right superior intervertebral facet of the third cervical, which was probably due to arthritis, but no further comment was possible.

Burial 53 had depressions in the inferior and superior surface of the lumbar vertebral bodies but no further comment was possible

There was an exostosis present on the iliac crest of the left innominate of Burial 58 (probably female, adult), probably due to partial ossification of the gluteous muscle. There was also an exostosis present on the right tibia of Burial 35 (male,35-45) on the lateral border immediately superior to the articular surface. There were exostoses present on the medial border of the proximal end of the right distal foot phalanx and the left first mid and distal foot phalanges.

It was not possible to discover the cause of these but it was noted that pathological changes were absent from the remaining bones of the feet.

No other pathological changes were noted in this population.

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Burial no.	Sex	Age (in years)	Stature		Pathology
			Metric (in metres)	Imperial	
35	male	35-45	1.57	5'1½"	✓
44	-	adult	-	-	✓
45	-	adult	-	-	-
53	male	25-35	1.75	5'9"	✓
57	female	16-20	-	-	✓
58	female	middle-aged	-	-	✓
59	male	mid-old	1.85	6'1"	✓
62	-	adult	-	-	-
68	?female	adult	1.63	5'4"	✓

Table 1: The results for the inhumations from Wenlock Priory.

The Catalogue of Human Bones from Wenlock Priory, Salop

Burial 35

Bone preservation: very good, most of the skeleton was represented
Sex: male, based on skull and pelvic morphology
Age: 35-45 years based on molar attrition (Brothwell 1991)
Stature: 1.57m ± 0.03 c. 5'1½" (Trotter 1970) based on the femora and tibiae
Pathology: Dental

There were two large abscesses by the left maxillary first molar. There was a large one on the apex of the root at the lingual side, and a smaller one at the apex of the root at the buccal side. There were small caries on the distal surface of the left maxillary second molar, the mesial surface of the right maxillary first molar and on the left maxillary second premolar at the distal interstitial margin at the level of the cemento-enamel junction. The caries on the left maxillary second molar was possibly associated with the abscess on the left maxillary first molar. There was considerable periodontal disease; slight enamel hypoplasia and slight deposition of calculus.

Skeletal

There was widespread slight development of osteophytes at the margins of all the major joints of the long bones and on all the vertebrae at the intervertebral facets and on the vertebral bodies.

There was an exostosis present on the right tibia on the lateral border immediately superior to the articular surface. It was not possible to comment further. There was also exostoses present on the medial border of the proximal end of the right distal foot phalanx and the left first mid and distal phalanges. It was not possible to discover the cause of these, but it was noted that pathological condition was absent from the remaining bones of the feet.

Burial 44

Bone preservation: quite good, most of the skeleton was represented
Sex: -
Age: adult based on epiphyseal fusion (Brothwell 1981)
Stature: -
Pathology: Skeletal

There was slight development of osteophytes on the superior body of the first sacral vertebra, on the superior articular surface of the left ulna and on the inferior articular surface of the left fibula. No further comment was possible.

Burial 45

Bone preservation: moderately good, only the skull and feet were represented

Sex: -

Age: adult, based on epiphyseal fusion (Brothwell 1981)

Stature: -

Pathology: -

Burial 53

Bone preservation: very good, most of the skeleton was represented

Sex: male, based on pelvic and skull morphology

Age: 25-35 years, based on molar attrition (Brothwell 1981)

Stature: 1.76m ± 0.04 c. 5'9" (Trotter 1970) based on the right humerus

Pathology: Dental

There were small caries present on the occlusal surfaces of the right mandibular second and third molars; there was medium periodontal disease and enamel hypoplasia and slight deposition of calculus on the teeth.

Skeletal

There was slight development of osteophytes at the margins and destruction of the surface of the body in the area of the annulus fibrosus, of three separate thoracic vertebrae. It was not possible to say if this was caused by a specific arthritic condition or simply by the ageing process. There were also depressions on the inferior and superior surfaces of the lumbar vertebrae. It was not possible to comment on this.

Burial 57

Bone preservation: moderate, most of the skeleton was represented

Sex: female, based on pelvic and skull morphology

Age: 16-20 years based on epiphyseal fusion (Brothwell 1981)

Stature: -

Pathology: Dental

There was slight enamel hypoplasia and deposition of calculus on the teeth.

Burial 58

Bone preservation: quite good, most of the skeleton was represented

Sex: female , based on pelvic and skull morphology

Age: middle-aged, based on molar wear and osteophytes on the vertebrae (Brothwell 1981)

Stature: -

Pathology: Dental

There was slight deposition of calculus and enamel hypoplasia on

the teeth.

Skeletal

There were two small button osteomas on two fragments of the exterior of the skull and one on the interior of another skull fragment.

There was porosity of the bony surfaces and development of osteophytes at the bone margins of the fifth cervical vertebra, two separate thoracic bodies, the fourth and fifth lumbar vertebrae and the first sacral vertebra. No further comments were possible on this pathology.

Burial 59

Bone preservation: moderate, most of the skeleton was represented
Sex: male, based on skull morphology and long bone metrics
Age: mid-old age, based on molar wear and the presence of osteophytes all over the skeleton
Stature: 1.85m ± 0.04 c. 6'1" (Trotter 1970) based on the left ulna
Pathology: Dental

There was considerable periodontal disease, enamel hypoplasia and deposition of calculus on the jaws and teeth of this individual. There were also large caries on the occlusal surfaces of the left mandibular first and second molars and the right maxillary first molar, as well as on the mesial surface of the right maxillary first premolar.

Skeletal

T ere was osteophytic lipping of the bodies and eburnation and destruction of the intervertebral facets on a considerable number of the vertebrae. The right inferior intervertebral facet of the second cervical vertebra was fused to the right superior intervertebral facet of the third cervical vertebrae. This was probably due to arthritis but no further comment was possible.

There was also slight osteophytic lipping of the margins of the articular surfaces of the long bones at all the major joints of the body.

Burial 62

Bone preservation: very good, only the pelvis and long bones were represented
Sex: -
Age: adult, based on epiphseal fusion (Brothwell 1981)
Stature: -
Pathology: -

Burial 68

Bone preservation: quite good, only the scapula, pelvis, and metacarpals were represented

Sex: probably female, based on pelvic morphology

Age: adult, based on epiphyseal fusion (Brothwell 1981)

Stature: 1.62m ± 0.04 c.5'4" (Trotter 1970) based on the right humerus

Pathology: Skeletal

There was slight development of marginal osteophytes on two rib facets and on the left acetabulum. No further comment was possible.

There was an exostosis present on the iliac crest of the left innominate, probably due to partial ossification of the gluteous muscle.

References

Brothwell,D.R. Digging up Bones.Third Edition. British Museum. 1981

Trotter,M. Estimation of Stature from intact long bones. In Stewart, T.D. (ed.) Personal Identification in Mass Disasters p71-83 Washington National Museum of Natural History. 1970

WD272

Bone preservation: quite good, most of the skeleton was represented

Sex: -

Age: adult, based on epiphyseal fusion (Brothwell 1981)

Stature: -

Pathology: -

WD275

This burial contained a minimum of two individuals:

275A

Bone preservation: moderate, only the vertebrae, pelvis, skull and femora were represented

Sex: -

Age: adult, based on epiphyseal fusion (Brothwell 1981)

Stature: -

Pathology: -

275B

Bone preservation: poor, only the skull and appendicular skeleton was represented

Sex: -

Age: infant, based on the size of the skull vault

Stature: -

Pathology: -

WD294

This was a small collection of adult human bones. It was not possible to make any further observations.

References

Brothwell, D.R. Digging up Bones. Third Edition. British Museum 1981

Trotter, M. Estimation of Stature from the intact long bones. In Stewart,T.D. (ed.) Personal Identification in Mass Disasters p71-83. Washington National Museum of Natural History 1970