

PROUDFOOT: HALLOW HILL (FICHE)

Excavations at the long cist cemetery on the Hallow Hill, St Andrews, Fife, 1975-77

by Edwina Proudfoot

ANATOMICAL REPORT:

The Dentitions: Dorothy Lunt.

The Skeletal Identifications: The late Archibald Young

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The two reports on the skeletal assemblage have been combined here for clarity, and the complete reports have been deposited with the Site Archive at NMRS.

Because of widespread damage to the site many skeletons were incomplete, bones fragmentary and skulls often damaged and teeth not *in situ*. Some were identified only from recognisable fragments but where the measurement of a long bone is given it implies a more or less intact state for the bone, the omission implies that no recognisable fragment could be found.

Cist 1

<u>Skull and dentition</u>	-	No remains.
<u>Teeth present</u>	-	None.
<u>Vertebrae</u>	-	Fragments.
<u>Sacrum</u>	-	Fragments.
<u>Ribs</u>	-	Fragments.
<u>Scapulae</u>	-	A small pair.
<u>Clavicle</u>	-	R small.
<u>Humeri</u>	-	R = 27.7 cm, L = 27.2 cm.
<u>Radii</u>	-	A pair.
<u>Ulnae</u>	-	R upper end a L.
<u>Hands</u>	-	Fragments of Metacarpals and Phalanges.
<u>Innominate</u>	-	L.
<u>Femora</u>	-	R = 39.7cm L upper and lower portions.
<u>Patellae</u>	-	A pair.
<u>Tibiae</u>	-	R distal squatting facet. L upper and lower portions.
<u>Fibulae</u>	-	R fragment L.
<u>Feet: Tarsals</u>	-	R Talus, Calcaneus (fragment) Navicular. Medial Cuneiform. L Talus, Calcaneus (fragment) Navicular.
<u>Metatarsals</u>	-	R 1st, 4th and 5th showing cross union after old fracture. L 1st, 4th and 5th and other fragments.
<u>Phalanges</u>	-	R and L 1st digit Proximal Phalanges and some others. unidentifiable fragments.
<u>Sex</u>	-	Female.
<u>Height</u>	-	150.5 cm - 157 cm.
<u>Age at death</u>	-	

Cist 2

Skull and dentition

- Only the left half of the cranial vault was present. The cranial base was badly shattered and compressed laterally. The cranial vault had received a cut in the left parietal region. The skull eventually collapsed leaving only part of the vault intact. The left maxilla was reasonably intact. An almost complete mandible and a further twelve teeth were found. The mandibular second premolars are erupting, roots incomplete. The second deciduous molar is still present, but the roots are almost completely resorbed and the tooth would very soon have been shed. The roots of the first premolars are not quite fully formed, while the roots of such first molars, canines and incisors as are present are completely formed. The mandibular second molars and maxillary left second molar have almost erupted to a functional level, but their roots are still incomplete. The third molars are unerupted and their crowns are not yet fully formed. The maxillary left second premolar was somewhat delayed in its eruption. No evidence of caries or of periodontal disease. Perikymata are clearly visible on the anterior teeth, but there is no evidence of hypoplasia of the enamel.

Vertebrae

- There were Vertebrae from all segments of spine. The absence of an Odontoid process on C2 suggests an age of 12-14 years.

Sacrum

- Fragments.

Ribs

- Epiphyses for the heads are missing - those for the tubercles show some fusion and suggest age a little over puberty.

Scapulae

- A pair, incomplete fusion at R Glenoid suggests age around 14 years.

Clavicles

- R and a fragment of L.

Humeri

- R and L upper epiphyses are not fused. Lower epiphyses show some fusion. Age 16-18 years.

Radii

- R and L lower epiphyses unfused. Age under 18.

and)

Ulnae

Hands

- 4 Carpals, and 4 Metacarpals are represented including L 1st; a number of Phalanges without epiphyses.

Innomimates

- R Hip Joint elements are not fused. L fragments. Age probably 14-15 years.

Femora

- A pair epiphyses not fused.

Patellae

- R and a fragment of L.

Tibiae

- A pair, upper and lower epiphyses not fused to shafts.

Fibula

- L shaft.

Feet

R 3 Tarsal bones and the Calcaneal epiphyses, L 6 Tarsal bones; 8 Metatarsal bone shafts and several Phalanges.

Child

Around puberty

Age at death

- 12-13 years(dental estimate); 14-16 years(anatomical estimate);

Cist 3

Skull and dentition

- The skull is badly shattered but the jawbones have survived better than the facial bones and the teeth are in good condition. All the permanent teeth except the third molars have erupted into their functional positions, but the roots of the second premolars are not yet completely formed. All the second premolars are in a slightly submerged position. The third molars are still lying within bony crypts in the jaws, their crowns not yet fully formed.
- No evidence of caries or of periodontal disease. The teeth are well-formed and there is no evidence of hypoplasia.
- X-rays show the slightly submerged position of the second premolars and the presence of retained deciduous root apices beside both mandibular second premolars. This suggests delayed eruption of the second premolars.

Vertebrae

- A block of 5 Lumbar Vertebrae and other fragments.

Sacrum

- Some pieces.

Ribs

- Many fragments.

Scapulae

- R and L.

Clavicles

- R and L - consistent with a sturdy 15 year old.

Humeri

- R and L. Neither upper nor lower epiphyses are fused.

Age probably under 15 years.

Radii

- R and L sturdy build. No Epiphyseal fusion.

Ulnae

- R and L fragmented. No Epiphyseal fusion.

Hands: Carpals

- R Scaphoid, Capitate, Hamate, Lunate and Pisiform and fragments of some L Carpals.

Metacarpals

- R 2 and some fragments.

Phalanges

- Fragments - age under 17 years.

Innominate

- R and L - all epiphyses missing.

Femora

- R and L. No Epiphyseal fusion.

Patellae

- R and fragments of L.

Tibiae

- R and L

Fibulae

- R and L, fragments - no Epiphyseal fusion.

Feet

- R and L. Tali, Calcanei and Naviculars and some Metatarsal fragments.

- Unidentified fragments

Child

- Sturdy, around puberty

Age at death

- 13-14 years (dental estimate); around 14 years (anatomical estimate).

Cist 4

No dental or skeletal remains were found.

Cist 5

No dental or skeletal remains were found.

Cist 6 (above Cist 24)

Skull and dentition

The skull was fragmentary, so distorted that the shape was difficult to make out. The jawbones were not observed. Two teeth were found loose.

The teeth are probably the mandibular right canine and second premolar. Much worn.

Scapulae

Fragments

Innominate

Fragments

Femur

Fragments

Tibia

Fragments

Fibula

Fragments

Tarsal

Fragments

Age at death

Middle-aged to elderly (dental estimate).

Cist 7

Unidentifiable fragments

Cist 8

Skull and dentition

The dentition is represented by the enamel shells of tooth crowns, the dentine and the root tissues having been almost entirely destroyed.

Six crowns are complete: these are from the four mandibular premolars and the mandibular left permanent first and second molars. The crowns of maxillary right permanent second molar are incomplete, but can be identified. Other crown fragments can be recognised as forming parts of permanent upper and lower incisors, canines, upper premolars and upper molars, but cannot be identified precisely.

The mandibular first molar and the incisor fragments show obvious, though early wear facets. To the naked eye the premolars and second molar appear to be unworn, but examination with a dissecting microscope reveals very tiny wear facets on the occlusal surfaces of all these teeth. It seems probable that they had erupted only a short time before death.

The teeth are large and well formed. No evidence of dental caries.

Fragments

Tibia -

Fragments of long bone shafts and arm bones

Age at death

11-13 years (dental estimate)

Cist 9

No bones or teeth

Cist 10

Skull and dentition

- Five isolated teeth, all from lower left quadrant. They comprise the premolars and the three permanent molars. Roots broken off, some root fragments present.
There is very little wear. The third molar appears unworn to the naked eye, but under dissecting microscope tiny wear facets visible. This tooth had just erupted into function. Teeth large and well-formed. No evidence of caries
- Thoracic vertebral transverse process
- Piece of shaft
- Heads of a radius
- Heads of femur
- 17-21 years (dental estimate); -about 18 years (Anatomical estimate)

Vertebrae

Humeri

Radii

Femora

Age at death

Cist 11

Skull and dentition

- Fragmented; bone in extremely poor condition, embedded in mass of cement-like soil). 11 permanent teeth still *in situ*, 7 still in place in the mandibular fragments, a further 7 loose teeth were in the soil. Total of 25 teeth found.
Good deal of maxilla and three small fragments of mandible found.
Because of damage, dental disease difficult to assess; no assessment for periodontal disease. 4 upper molars appear to have had carious lesions, one completely broken down by caries, leaving only one root in position. Another molar has a large cavity, which probably exposed the pulp of the tooth. The two other molars have very early lesions.
Other bone fragments not identifiable. Portions of long bone shaft have very thick cortex
- 38-44 (dental estimate)

Age at death

12. Not a cist.

13. Not a cist.

Cist 14

Skull

- Much fragmented. Cranial vault noted as very thick.
Occlusal surfaces of all the mandibular teeth visible in the cement-like soil; three maxillary molars could be seen.
Mandibular molars show severe degree of attrition to the extent that secondary dentine has been exposed in the first molars.
Mandibular incisors, canines and premolars show less wear than expected with this degree of attrition, perhaps because of chewing, possibly of an occupational nature. This would affect the age estimate. Or the maxillary anteriors and premolars may have been lost in life.
No evidence of caries. slight general resorption of alveolar bone, due to age change rather than indication of disease. Both mandibular third molars congenitally absent.

Other bones

- The entire skeleton was present but found to be unidentifiable, because of damage

Age at death

- Middle-aged -late forties.

Cist 15

Age at death

- fragmentary foetus
- Not more than 28 weeks.

Cist 20

Skull and dentition

- Small fragments of cranial vault; both petrous temporal bones; mastoid process present on R temporal; fairly large. Small portions of jaw, attached to three teeth. Eight maxillary, 5 mandibular permanent teeth, all affected by *post mortem* destruction of roots. One third molar shows wear; the tooth had obviously been in function for a time and the individual was adult.

In the R second molar there is large carious cavity which opens into the pulp chamber, would have been an abscess involving root of tooth. No other evidence of caries; no evidence of enamel hypoplasia. The periodontal condition cannot be assessed.

Femur

- Fragments
Other fragmentary bones.

Age at death

Mid twenties, c. 23-27 years.

20/2

Disturbed cist, all remains fragmentary and bones from a second individual were found, although not necessarily from Cist 20...

Dentition

Two upper premolar crowns and fragment of upper molar crown. greater degree of wear than the other remains.

Femur

Fragment, larger than other individual

Age at death

Older than other individual

Cist 21

Skull and dentition

- Cranial vault and facial bones in correct relative positions, but damaged; the cranial base was found to be separated from cranial vault.

Cervical vertebrae pushed upwards and forwards, stacked below and within the curve of the mandible. Jaws still in relation to each other. Maxilla separated in two portions from base of skull.

Both zygomas and some calvarial fragments were separated from the rest of the skull. The calvarium was thin, the supraorbital foramina were minimal and the sutures were still unclosed.

Mandible broken into two and the tooth-bearing area of the maxilla was broken. All permanent teeth have all erupted, including the large distal permanent molar which has developed, the root of this tooth is complete. There is very little attrition.

Both mandibular third molars and the maxillary R third molar are congenitally absent.

No evidence of caries or of periodontal disease.

Vertebrae

- Besides the complete set of cervical vertebrae found "stacked" below the skull; other vertebrae were also present.

Sacrum

- The 5 segments of the sacrum showed incomplete fusion. Age therefore less than 25-28.

Ribs

- Mostly broken; from a small slightly built individual.

Scapulae

- R and L both broken.

Clavicles

- R lateral two thirds L lateral end.

Humeri

- R = 31 cm L damaged upper end.

Radii

- R = 22.8 cm L broken.

Ulnae

- R shows unusual distal bowing L-broken.

Hands

- R and L sets are almost complete though some phalanges are missing.

Innominates

- R and L both lack the pubes. Their auricular surfaces do NOT match the auricular surfaces of the sacrum which are of different size and shape.

Femora

- R = L = 42.7 cm. The L great trochanter is damaged.

Patellae

- Two.

Tibiae

- R = L = 34.8 cm.

Fibulae

- R and L.

Feet

- R and L sets of tarsals and metatarsals are almost complete.

Height

- 160.3 cm - 165.3 cm

Sex

- Probably female

Age at death

- 18-20 years (dental estimate); 20-22 years anatomical estimate).

Cist 22

Skull and dentition

- Skull in poor condition, much erosion of cranial base.
- Five teeth recovered from cranial cavity. Part of maxilla and more than half mandible, with isolated teeth found among other bones.
- *Post mortem* destruction; not possible to return all recognisable teeth to their sockets. Some teeth unrecognisable.
- Oral health poor. Around four teeth *in situ* in the jaws there has been gross destruction of the alveolar bone due to periodontal disease; a periodontal abscess has formed in connection with the left second molar. Large masses of calculus (tartar) are present on some of the isolated teeth. Evidence of large carious cavities can be seen in two of the unrecognisable tooth fragments, the mandibular left first molar had been lost *in vivo*, due either to caries or to periodontal disease; other teeth could have been lost before death. The small area of palate which has survived shows considerable pitting on the surface, indicating an inflammatory condition.
- Teeth heavily worn; degree of attrition suggests individual probably aged over 50 at death.

Vertebrae

- Seven thoracic and 5 lumbar are represented - the bodies are badly eroded.

Ribs

- A number of fragments.

Scapulae

- R and L. The L glenoid labrum is partly ossified.

Clavicles

- Parts of a R and a L.

Humeri

- R = 32.8cm L = 32.2cm.

Radii

- R and head of L.

Ulnae

- R and piece of L.

Hands

- R hamate, capitate and lunate.

- 6 phalanges are represented.

Innomimates

- R pieces, L acetabular region.

Femora

- R and L, upper and lower parts of each.

Patellae

- R and L.

Tibiae

- R = 37.2. L damaged upper end.

Fibulae

- Both R and L broken.

Feet

- R and L full sets of tarsals and all metatarsals are represented; also 4 phalanges, 2 sesamoids and some fragments of phalanges.

- Arthritis and periodontal disease

Height

- 169cm-174 cm (if male); 166 cm- 170 cm (if female).

Sex

- Male, probably.

Age at death

- over 50.

Cist 24 (below Cist 6)

Skull and dentition

- The only recognisable parts of the skull were a pair of small temporal bones.
- Two crowns complete, upper left third permanent molar and lower right first premolar. Third incomplete shell probably represents a fairly heavily worn lower first permanent molar. Considerable attrition.

Proudfoot. anatomical report [inventory] - Sheet 2/A2-E3

- Tibia - Fragment.
- Feet - R talus and calcaneus; two metatarsals
Unidentifiable fragments of rest of skeleton.
- Age at death - Mature adult

Cist 25

Skull and dentition

- Virtually complete; heavy development of bone in the glabellar region suggests it may be male. Facial bones and upper jaw well preserved; mandible complete.
All teeth present, except two lost *post mortem*. Moderate attrition. No dental caries or periodontal disease in the mandibular molar regions. Teeth well-formed, perfectly spaced, in regular well-shaped arches. Mandibular third molars reduced in size.

Vertebrae

- All present except 12th thoracic.

Sacrum and Coccyx

- Present.

Hyoid

- The body and a greater horn.

Sternum

- A piece.

Ribs

- Eight R and 12 L - almost all complete and some fragments.

Scapulae

- A pair.

Clavicles

- A pair.

Humeri

- R = 29.4cm L = 29.9cm.

Radii

- R = 21.9cm L = 22.1cm.

Ulnae

- A pair.

Hands

- R metacarpals 1st and 2nd and another fragment
L all carpals except hamate, all 5 metacarpals and 19 phalanges.

Innominates

- Both; possibly female.

Femora

- R = 42.4, L = 41.7.

Patella

- Part of a L.

Tibiae

- R = 32.2, L = 32.4.

Feet

- R all tarsals (except cuboid), all 5 metatarsals.
L all tarsals (except cuboid and the 1st and 2nd cuneiforms) and metatarsals 1, 3, 4 and 5; and 5 phalanges.

Height

- 158.7 cm - 166.8 cm (if male).
154 cm - 162.3 cm (if female).

Sex

- Male (from skull) or female (from pelvis).

Age at death

- 25-30 years (dental and anatomical estimate).

Cist 26

Skull and dentition and teeth

- Cranial base and skull complete; some of the thinner bony plate lost; smooth glabella may indicate female. Alveolar processes of the maxilla fairly well preserved, mandible intact except for some damage to the condyles.
- Teeth fairly heavily worn; degree of attrition of the first molars suggest an age in the late thirties, though the wear of the other molars is somewhat less and would be consistent with an age in the mid thirties.

A carious cavity of moderate size is present in the maxillary right second premolar; a small lesion may be developing in the adjacent first molar. Slight evidence of periodontal disease, with some horizontal resorption of alveolar bone in the molar areas which seems a little worse in the maxilla than in the mandible.

More serious loss of bone has occurred in the anterior region of the maxilla, where both central incisors and the right lateral incisor have been lost *in vivo*. The sockets for the left lateral incisor and for the maxillary canines are extremely shallow and one or more of these teeth would probably soon have been lost. Associated with this loss of maxillary alveolous, there is also bone loss from the floor of the nose, and the anterior nasal spine has disappeared. This combination of features: loss of anterior nasal spine with loss of anterior maxillary alveolous and consequently loss of the incisors and sometimes the canines, is characteristic of a form of leprosy, and it is possible that this individual was a leper.

Vertebrae

- Nearly all vertebrae show some degree of damage: present are C1-5, C6 in 2 pieces (C7 was not found), thoracic 1-12 (thoracic 10 appears to show incomplete fusion of the 2 halves of the body and L1-5. Judging by the size of the transverse foramina of the cervical vertebrae the L vertebral artery was smaller than usual.

Sacrum

- Damaged but probably female.

Sternum

- The manubrium and part of the body.

Ribs

- At least 8 R and 7 L are represented.

Scapulae

- Both broken.

Clavicles

- Both are damaged.

Humeri

- R = 29.8cm, L = 29.0cm - heavy muscular markings on R which is nearly a cm longer than L.

Radius

- L = 20.4cm.

Ulnae

- L and proximal end of a R.

Hands

- Three R carpals and all L carpals. All L metacarpals but only R 2nd, 3rd and 5th; and several phalanges are represented.

Innominate

- Both lacking the pubic region.

Femora

- R = 41.1cm, L broken but may have been about 1cm shorter.

Patellae

- A pair.

Tibiae

- R damaged, L = 31.5cm distal squatting facets are present.

Fibulae

- L, R damaged. Cortical markings suggestive of leprosy are present on both fibulae and tibiae. **Illustration A9.**

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Feet - Four R tarsals and all L tarsals. All metatarsals (except R 2nd) and 9 phalanges. Both tali show squatting facets.
- Height - 152 cm - 159 cm.
- Sex - Female
- Age at death - 35 - 39
- Pathology - Probably a leper

Cist 27

Skull and dentition

- Skull fairly well preserved, except for loss of right half of face and part of the cranial base. The glabella is smooth and may be that of a female.

Teeth present

- Mandibular dentition complete; only one tooth missing from the left maxilla; no trace of right maxilla. Two isolated right maxillary teeth recovered; heavily worn; degree of attrition of molars suggests age at death in the late 30s-early 40s. No evidence of caries; individual suffered from severe periodontal disease; deep 'infected' pockets had formed in the bone round many of the teeth, especially in the mandible. The mandibular right canine has failed to erupt into its correct position and remains deeply embedded in the bone of the mandible. It has 'wandered' across the midline and now lies with its crown below the root of the mandibular left lateral incisor.

Vertebrae

- Pieces of 6 cervical; thoracic 1 - lumbar 5 are all represented.

Sacrum

- Broken, probably female.

Ribs

- Pieces of 10 R and 8 L plus other fragments.

Scapulae

- Pair, broken.

Clavicles

- Pair.

Humerus

- R = L = 30.7cm.

Radii

- R damaged. L = 23.1cm.

Ulnae

- R damaged. L almost intact.

Hands

- All R carpals (except triquetral and pisiform), L trapezium, scaphoid and lunate, and parts of 3 other damaged carpals; all metacarpals (except R 1st) and shafts of 2 others, neither of which is a 1st and which therefore came from another individual; also parts of 5 pairs of proximal phalanges and of 5 intermediate phalanges.

Innominates

- R and L both lack pubic region. There was probably some sacroiliac arthritis.

Femora

- R = 41.4cm, L is broken.

Patellae

- Pair (R broken).

Tibiae

- R = 33.8cm, L broken.

Fibulae

- Pair (L broken).

Feet

- Pairs of tali, calcanei and naviculars, L 3rd cuneiform; metatarsals R 1st-4th, L 1st, 4th and 5th and another fragment; and 4 proximal phalanges.

Height

- 157 cm - 167 cm.

Sex

- Female

Age at death

- Late 30s.

Pathology

- Severe oral disease. Sacroiliac arthritis

Cist 28

- Skull and dentition - Right Temporal bone.
- No teeth present
- Vertebrae - Two fragments
- Innominate - Two fragments from right
- Age at death - Very little bone survived in this cist.
Young child, perhaps in 2nd year.

Cist 29 (above 46)

- Skull and dentition - No skull fragments
- Seven fragmentary permanent teeth present, three maxillary and four mandibular. Three are third molars; all show wear facets, indicating that the individual was adult. Single maxillary incisor shows severe wear, to a greater extent than might be expected from the degree of wear of the molars. None of the teeth shows any clear evidence of caries.

- Sacrum - 1st sacral segment
- Scapula - Left
- Humeri - Both
- Radius - Right
- Ulnae - Both
- Carpus - Right scaphoid, trapezium, trapezoid, capitate and lunate
- Metacarpus - Left 3rd metacarpal, some phalanges
- Innominate bone - Pieces of both
- Femora - Pieces of both - heavy build with marked muscle markings.
- Tibiae - Pieces of both
- tarsus - Pairs of tali and calcani
- Much of the skeleton was fragmented and unidentifiable and much was missing from this disturbed cist.
- Sex - Male, heavily built
- Age at death - 26 - 32 years (dental estimate)

Cist 30

- unidentifiable fragments
- Calcaneus, Talus - Fragments

Cist 31

- unidentifiable fragments

Cist 32

- Skull and dentition - No skull fragments
- Crown fragment of molar
- Skeletal material - Rib and various unidentifiable fragments

Cist 33

Skull and dentition

- Badly crushed; bone in poor condition. Attempts to salvage fruitless, but dentition recovered.

Bone of jaw disintegrating, but teeth still lying in correct positions and their relationships could be observed, though it was possible to retain only a few teeth in their correct positions. Not always possible to observe the degree of root formation of the permanent teeth, because of *post mortem* destruction.

- 15 permanent teeth and 3 deciduous molars recovered. The permanent first molars and permanent incisors had erupted into their functional positions and showed slight traces of wear in the form of enamel facets. The root of a maxillary permanent central incisor was not yet fully formed.

The mandibular left canine and first premolar were in the process of erupting into function; their deciduous predecessors would have been shed. The maxillary left first premolar was slightly less advanced: this tooth was not recovered but its deciduous predecessor was found, indicating that the latter was *in situ* at the time of death. Its root was much resorbed and the tooth would soon have been shed. The mandibular second premolars were lying deep in their crypts, with the second deciduous molars still in position above them and still in full function. The stage of development of the mandibular canine and the premolars indicates a probable age at death of between 9 and 10 years.

The permanent second molars were developing within their crypts: crowns complete and about 3-5 mm of their roots had formed. This suggests an age of c.9-10 years.

The teeth were well formed; no evidence of hypoplasia; no signs of dental caries.

A partially developed mandibular crown, possibly a second or third molar was found. If a second, then not from cist 33; development age 07-8 years. If a third molar then development age of 11-13, again a different age. There is every possibility that this tooth belongs to the burial from an adjacent cist, since all in the area were severely bulldozed.

Skeletal remains

- Very few fragments of bone

Age at death

- less than 10 years (dental estimate)

Cist 34

Skull and dentition

- None.

- Parts of three teeth were present. The crown of a maxillary right first permanent molar shows very early attrition facets. the crown of the maxillary right second premolar shows no trace of wear, even under the dissecting microscope, suggestive that it was unerupted or just erupting. a third small fragment of a tooth crown, which shows signs of wear is probably but not certainly part of the maxillary right deciduous second molar.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

Skeletal material - A few weathered fragments and a piece of calvarium.
Age at death - 7-8 years (dental estimate)

Cist 35

Skull and dentition - None
- One, heavily worn mandibular left first permanent molar.
Skeletal material - Rib, possibly R11 or 12.
Age at death - Early to mid-forties (dental estimate).

Cist 36

Skull and dentition - None.
- Two. Mandibular permanent central incisors, worn.
Vertebrae - The whole spinal column seems to be represented, though many vertebrae are broken.
Sacrum - The Sacrum of a fully adult female over 30 years.
Hyoid - A piece.
Sternum - Part of the body.
Ribs - Numerous fragments and 4 L nearly complete.
Scapulae - Pair, broken.
Clavicles - Pair, broken.
Humeri - R = 30.9cm L broken.
Radii - R broken. L = 22.7cm.
Ulnae - Pair.
Hands - R scaphoid, trapezium and pisiform, all metacarpals and all phalanges but for one terminal phalanx.
L scaphoid, capitate and hamate, metacarpals 2-5, and 6 phalanges.
Innominates - Both represented.
Femora - R broken; L lower end damaged - not heavy build.
Tibiae - Pair, broken.
Fibulae - R broken, L almost intact.
Feet - Pairs of both tali and calcanei, and 5 phalanges.
Height - 161 cm - 165 cm
Sex - Female, probably
Age at death - Mature adult, over 30 years, (dental estimate).

Cist 37

Skull and dentition - None
- No teeth
Vertebrae - Fragments.
Other unidentifiable fragments.

Cist 39

Skull and dentition

(Teeth of two individuals represented, in disturbed context)

- 39/1). Fragments of vault, pair of Temporal bones, L side of Sphenoid of a young child.

Two partially developed deciduous teeth indicate a young infant. The crown of the r central incisor is slightly damaged but appears to have been about 5/6 formed. The crown was certainly not quite complete at the time of death. The virtually undamaged crown of the first deciduous molar is almost 3/4 formed. According to Kraus and Jordan (1965) this is the extent to which these teeth would normally have been formed at birth. The infant may have been a neonate or may have been older but died before 1 1/2 months, at which age the crowns of the upper central incisors should be complete.

Age at death

- 39/2 . Mandibular R first premolar, with complete root and slight attrition of the crown, probably from a young adult,

39/1 Possibly neonate, but no more than 1 1/2 months, based on teeth. Under six months, based on bone evidence.

39/2 Young adult

Cist 41

Skull and dentition

- No skulle

Parts of crowns of four permanent teeth, identified as maxillary left permanent first and second incisors and mandibular right first and second premolars. The premolars and second incisor had not been in function at the time of death; crowns probably not quite completely formed. The first incisor is broken, not possible to be certain whether in function, but appearance suggests probably not.

Skeletal material

- None

Age at death

Child, 7-8 years, (dental estimate).

Cist 42

Skull and dentition

- Skull and mandible, jaws gaping, but condyles of the mandibles still in the glenoid fossae.

All mandibular teeth still appeared to be *in situ*, but many of the maxillary teeth were displaced; a central incisor was in the left orbit; a third molar was wedged between the jaws; just behind it the body of the hyoid bone was hooked round the anterior margin of the right ascending ramus of the mandible.

- Upper part of maxilla badly damaged; palate and alveolar process present. Mandible complete. 30 permanent teeth in situ, in functional positions, maxillary incisor, canine, first premolar, found loose, fitted sockets.
Dentition shows fairly heavy attrition. Teeth well formed and well calcified; no evidence of dental caries. Moderate generalised resorption of alveolar bone. Periodontal disease in the maxillary regions, with formation of infected pockets around the molars. On left side of maxilla is a gap between first premolar and the first molar where a tooth has been lost in vivo: this gap rather wide and it may be that the second premolar was congenitally absent and the second deciduous molar was retained for some years before being shed.
The maxillary left canine is particularly heavily worn; no obvious reason. This canine and the adjacent first premolar exhibit unusual grooves on the sides of the crowns, which do not appear to hypoplasia lines. They may have been artificially produced, eg by a wire. No other teeth affected in this way and no satisfactory explanation can be given.
- Vertebrae - Cervical 1-7 were found in situ below the foramen magnum of the skull along with the Hyoid. The 1st cervical vertebra (atlas) shows partial ossification of the posterior atlanto-occipital membrane thus almost making foraminae for the vertebral artery (more marked on the L than the R side). There was also some ossification extending into the ligaments attached to the Odontoid process and lipping of the Odontoid facet on C2 (axis) vertebra.
All thoracic and lumbar vertebrae were identified.
- Sacrum - and first coccygeal segment present. Sacrum almost certainly female in form.
- Ribs - All 12 of each side are represented.
- Clavicles - Pair.
- Scapulae - Pair.
- Humeri - R = 32.4, L = 31.4cm.
- Radii - R = 23.3, L = 23.1cm.
- Ulnae - Pair.
- Carpals - Pairs of trapezoid, scaphoid, lunate, hamate, and a L trapezium and a L Capitate. A damaged bone may be the R trapezium.
- Metacarpals - All 10.
- Phalanges - Nine proximal, 6 intermediate.
- Innominate bones - Pair, lacking parts of ischium and pubis.
- Femora - R = 40.9 and L = 42.2cm. R neck is anteverted.
- Patellae - Pair.
- Tibiae - R = 34.2, L = 34.7cm.
- Fibulae - Pair.
- Tarsals - Pairs of talus, calcaneus, cuboid, all 6 cuneiforms and both naviculars which show deep groove below the tubercles.
- Metatarsals - R 1st, 3rd, 4th, 5th and another (? 2nd) damaged.
L 1st, base of 3rd, 4th, 5th and another probably the 2nd.
- Phalanges - Three proximal, one intermediate and 2 distal.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Height - 163 cm-168.5 cm, based on arm bones Or 156 cm- 163 cm, based on leg bones.
- Sex - Female
- Age at death - 30-35 years (dental and anatomical) estimate.

Cist 43

- Skull and dentition - None
- R mandibular canine, mandibular left first incisor, heavily worn maxillary incisor. All adult, but the mandibular teeth are less heavily worn than the maxillary incisor, not likely from same individual
- Sacrum - Terminal segment
- Scapula - Piece
- Humerus - Fragment of lower end
- Hands - Pair of hamates, a pisiform, small sesamoid, l 1st and r 2nd metacarpals, 4 proximal and 3 intermediate carpal phalanges,
- Pelvis - Iliac crest, fragment
- Patella - Left
- Tibia - Fragment
- Fibula - Lower end of R
- Tarsus - Pairs of tali and calcanei, a r navicular and a l 1st cuneiform
- Metatarsals - R 1, 3-5, L 3-5,
- Phalanges - One proximal and 3 intermediate pedal
- Age at death -- Adult.

Cist 44

- Skull and dentition - The R mandibular condyle and the root of the zygomatic process of the R Temporal bone were found among a mixed collection of hand and foot bones.
Cranial vault in position; upper face and mandible sseparated from cranium. Mandible broken; maxilla fragile; alveolar portions of both maxilla and mandible reasonably intact. In both jaws severe pathological breakdown of the dentition

- Teeth present
- Canine and first premolar present in R maxilla; both heavily worn; socket for missing second premolar. Posterior to this a large abscess cavity, almost certain that the molars had been lost before death. Left maxilla has socket for second premolar, less heavily worn than the R premolar. Behind this, ghost of sockets into which fit the tips of the roots of first and second molars, the two teeth held together by a mass of calculus. These teeth must have been extremely loose.
 - R mandible contains two heavily worn premolars, one with large carious cavity. First molar so completely destroyed by caries that only stumps of roots remain; second molar also has large carious cavity extending into pulp. In L mandible are remains of premolar sockets; behind these only an abscess cavity, indicating that all the mandibular L molars had been lost some time before death.
 - Such gross pathological disintegration of the dentition makes it impossible to give estimate of age at death, except in so far that both the extent of pathological damage and the heavy attrition of some of the remaining teeth probably indicate middle-aged or elderly.
 - A considerable amount of pain was probably suffered and the mouth must have been quite foul; it seems impossible that the individual could chew, except with the premolars on the left.
- Vertebrae
- Only the 7 cervical vertebrae were found. These showed gross arthritic changes from C2 down to C7. Neither sacrum nor sternum was identified.
- Ribs
- Many fragments (L 1st-3rd were recognisable) from both sides.
- Scapulae
- R and L in pieces.
- Clavicle
- Only the R; it was small and of light build? from an elderly female.
- Humeri
- Pair - lower halves of shafts and the heads.
- Radii
- R lower end L damaged.
- Ulnae
- R broken, L damaged.
 - It is interesting to note that both R Humerus and Ulna showed heavier muscle markings than the L corresponding bones.
- Hands
- As received, hand and foot bones were mixed up, not only as to side but also as to parts of the body. The hands were represented by both scaphoids, a capitate, lunate (l), a trapezium? r and a damaged triquetral, metacarpals l 1st-5th, r 1st and fragments of 3 others, and 8 proximal, 3 intermediate and 3 terminal phalanges.
- Innominate
- Most of the L was recovered. The R had the head of the R femur jammed into the acetabulum. There were gross arthritic changes on both surfaces.
- Femora
- Pair, both broken. There was an old malunited fracture of the R femoral neck with impaction of the neck into the head. This was not an immediately preterminal event. Illustration A4.
- Patellae
- Pair.
- Tibiae
- Pair, broken.
- Fibulae
- Pair, broken.

- Feet - The following bones were found - R talus and calcaneus, naviculars (pair), several very broken items which were probably also tarsal bones, metatarsals 1st (pair) and pieces of 5 others, and 5 proximal and one terminal phalanges.
- Sex - Probably female
- Age at death Elderly

Cist 45

- Skull and dentition - Part of a lateral orbital margin and 3 fragments of mandible.
- Teeth present - Parts of 3 permanent teeth present -a) maxillary R central incisor, heavily worn; b) mandibular R molar, either first or second, heavily worn; c) root of mandibular molar.
- Small portion of body of mandible present. Sockets for the incisors lost due to resorption of the alveolar bone. R canine, both premolar and first and second molar sockets can be recognised, though all much reduced in height and the first molar socket shows evidence of severe inflammation. Highly probable that specimen b) is from the second molar socket and specimen c) from the first molar socket. If this is case then crown of the first molar lost during life, as result of advanced dental caries.
- Mandible shows several tori of the alveolar process on the lingual side and these, together with evidence of advanced periodontal disease and severe dental caries confirm the impression that this is a mature individual.

- Vertebrae Three pieces.
- Rib - Five pieces.
- Scapula - Piece of spine of a R.
- Phalanges - From both hands and feet.
- Femur - The lower condyles and a piece of shaft of a L.
- Humerus, Ulna, Tibia, and Fibula, Patella, 2 Metatarsals. Pieces of shaft
- Sex
- Age at death - Mature adult, possibly in the 40s, (dental estimate)..

Cist 47

- Skull and dentition - Calvarium fragments
No teeth found
- Femur - Part of head
- Humerus - Part of head
- Age at death - Late 30s, based on degree of suture closure.

Cist 48

This Cist contained 2 skeletons, not contemporary. There were also 2 L Metatarsals (a 3rd and a 4th) which cannot be fitted to or matched with those of the 2 skeletons.

48/1

Skull and dentition

- Vault of skull almost intact, but the base and facial bones have been damaged. Moderate development of bone at glabella;
- mastoid processes quite strong.

Teeth present

- Mandible well preserved, full complement of 16 permanent teeth. Maxilla has suffered post mortem damage; only 8 teeth present. The teeth exhibit a severe degree of attrition; some molars worn down to the neck of the tooth. amount of wear suggests that the individual may have been in the late 40s or 50s

State of oral health poor. Large carious cavity present in one of the upper molars: half the crown has been destroyed by the lesion, which opens widely into the pulp chamber. Probable that an alveolar abscess has resulted from this condition, but as the alveolus of this tooth has disappeared *post mortem*, the presence of the abscess cannot be verified. Evidence of at least 4 other abscesses in the maxilla and it seems probable that the associated teeth have been lost *in vivo*.

Only one abscess present in the mandible, associated with the root of the R first permanent molar; in this case it is probable that the abscess resulted from severe attrition rather than from caries.

Individual suffered from periodontal disease and the roots of all the teeth have been exposed by marked horizontal recession of alveolar bone.

Vertebrae

- Cervical 1st, Thoracic 2nd-12th, parts of L 1st-4th plus some fragments.

Sacrum

- Rather narrow form - probably male.

Sternum

- Manubrium and pieces of the body.

Ribs

- R 1st showed ossification of its cartilage; another 7 R and 8 L are represented and also many fragments.

Scapulae

- R and L represented.

Clavicles

- Pair.

Humeri

- R = 31.5cm, L = 30.5cm. Both show well marked muscle markings, especially on the lateral epicondylar ridges.

Radii

- R in 3 pieces, L = 23.4cm.

Ulnae

- Pair.

Hands

- R trapezoid, capitate, hamate and lunate; all 5 metacarpals; L trapezium, trapezoid, capitate, hamate, scaphoid, lunate and triquetral; all 5 metacarpals, and a total of 8 proximal, 4 intermediate and 2 distal phalanges.

Innominate

- Pair, pubic portions broken off - of heavy build.

Femora

- R = 41.6cm, L = 41.2cm.

Patellae

- Pair.

Tibiae

- Pair. R = L = 32.8cm.

Fibulae

- R lower third, L less head.

There would appear to have been an old fracture of the lower ends of fibula and tibia on R.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Feet - R no tarsals but a complete set of metatarsals.
L complete set of tarsals and metatarsals.
Also a total of 10 proximal, 2 intermediate and 2 terminal phalanges, and a sesamoid bone.
- Height - 160cm - 169 cm. Powerful build.
- Sex - Male
- Age at death - Late 40s-early 50s (dental and anatomical estimate)

~~48/2~~

- Skull and dentition - Fragmentary; most of vault preserved. Relatively slight bone development at glabella; seems possible that this individual may have been female.
- Teeth present - Mandible and alveolar portion of the maxilla well preserved. All mandibular teeth *in situ* at time of death; 11 still *in situ*. Maxillary alveolous shows *post mortem* damage in the incisor region, but all remaining teeth were present at death; 9 remain *in situ*. Permanent teeth erupted fully into functional positions with the exception of one upper premolar which has become rotated by 90°. The tooth takes up more space than normally; this may perhaps suggest that there could have been some abnormality of tooth position or number in the damaged incisor region.
- The teeth show a degree of attrition. Oral health good. No evidence of dental caries; early periodontal disease just beginning to affect the mandibular third molar areas.

- Vertebrae - only a piece of a thoracic vertebrae was found.
- Sacrum - Only the 1st segment.
- Hyoid - A piece.
- Sternum - The body.
- Ribs - A L 1st probably belonged to this body.
- Scapula - Parts of a pair.
- Humeri - R = 30.6cm and has a supratrochlear foramen.
L lacks upper end. Part of a head was found separately.
- Radius - L = 22.6cm showing arthritic changes at lower end and slight dorsal displacement of lower end due to an old healed fracture.
- Ulnae - R broken, L less head and showing arthritic changes at trochlea.
- Hands - R triquetral and hamate, one damaged metacarpal.
I no carpals or metacarpals were found.
There were also one proximal and 2 intermediate phalanges.
- Innominates - Pair, much damaged - they fit the sacral piece and the femoral heads.
- Femora - R = 43.1cm, L = 43.6cm.
- Tibiae - R = 34.9cm, L = 35.1cm.
- Fibulae - Pair, broken.
- Feet - R all tarsals, metatarsals 1st, 3rd, 4th and 5th.
L all tarsals except 2nd cuneiform (but another cuneiform may belong here) metatarsals 1st, 3rd, 4th and 5th.
3 proximal, and 2 distal phalanges also found.
- Height - 160 cm - 164 cm

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Sex - Female, based on dentition
Age at death - c24-28 (dental estimate).

Cist 49

Skull and dentition

Skull comminuted. Facial bones better preserved than cranial vault or cranial base. Heavy development of bone at the glabella. Nasal bones project sharply, suggesting a prominent aquiline nose. Bone of cranial vault thick.

Teeth present

- Maxilla and mandible fairly well preserved. Full complement of 32 permanent teeth (two teeth recovered separately during excavation for teeth only empty sockets. All teeth have erupted into functional positions, arranged without overcrowding, in well-formed arches. Severe attrition of most of teeth first molars worn to the extent that almost the entire crown has disappeared, secondary dentine filling the original pulp chamber has also been worn down; no evidence of pulp exposure and abscess formation in the mandible. Inflammation has been present round the roots of the maxillary first molars, *but post mortem* damage here makes it difficult to be certain whether this due to very small pulp exposures or to periodontal disease. No sign of caries, but evidence of periodontal disease can be seen in marked horizontal recession of alveolar bone round all the teeth and in the shallow pockets which have formed beside some of the upper incisors and canines.

Vertebrae

- No cervical vertebrae were identified. There are pieces of at least 9 thoracic vertebrae, 5 lumbar vertebrae which all fit together and fit onto the sacrum - L 1-4 show arthritic lipping, L 1 probably had a "Lumbar rib" (L side) articulating with it, L 5 showed failure of union of the 2 halves of the neural arch. Several of the thoracic vertebral bodies show different heights as between R and L sides, possibly the result of old compression fractures. There is, in addition, a single much larger lumbar vertebra.

Sacrum

- The upper 2 segments.

Sternum

- The manubrium and body.

Ribs

- R and L 1st Ribs and a number of fragments.

Scapulae

- R broken; L broken, its acromion process was found at L side of pelvis.

Clavicles

- R 2 pieces, with an arthritic Sterno clavicular joint; L also present. Both are long and of fairly heavy build.

Humeri

- R was slightly larger than L, and its head was found separately. L lacked its head. Both carried heavy muscular markings.

Radii

- R (broken) = 26.0cm, L = 25.7cm.

Ulnae

- A pair.

Hands

- R lunate, hamate, and trapezium, all 5 metacarpals; 1 scaphoid, trapezium, capitate and pisiform, all 5 metacarpals, plus 9 proximal, 7 intermediate, and 4 distal phalanges not allotted as to side.

Innominate

- R pubis and 3 other pieces; L, most of it. Almost certainly male.

Proudfoot: anatomical report [inventory] - Sheet 2/A.2-E3

- Femora - R = 46.0cm, L = 46.8cm, good muscle markings.
- Patella - A large R.
- Tibiae - R = L = 38.4cm.
- Fibulae - A pair.
- Feet - R talus, calcaneus, navicular, cuboid and medial (1st) cuneiform, all 5 metatarsals; l all tarsals except for cuboid, all 5 metatarsals: both 1st toe proximal phalanges and 7 other proximal, and 2 intermediate phalanges. These bones are congruous and probably all belong to one individual BUT, there are also present R Metatarsals 2-5 which are smaller than those above, yet seem to belong to each other and match L metatarsals 1-4, and L 1st and 2nd cuneiforms.
- Height - 172 cm - 178.5 cm
- Sex - Male
- Age at death - 40-50 years, or older, (dental estimate).

Cist 51A,B,C complex

Cists 51A and 51B lay adjacent, both disturbed. Some bone from disturbed S end of complex from third burial 51C.

NB Individual 51A is from cist 51C. Individual 51B is from cist 51B. Individual 51C is from cist 51A. These were not differentiated during excavation as mixed, but cist 51A had adult bone fragments, possibly in situ. 51B contained fragments of child of c10 years in situ. From this the other identifications follow. The individuals have not been separated in the skeletal lists, but the skull and dentitions have been separately listed.

- Skull and dentitions - Three tiny fragments of mandible present, all include same area at the tip of the chin, thus three individuals represented.
Fragments of calvariae were of 2 thicknesses, one very thick with sutures fused internally, the other is thinner with unfused sutures. The relative torculae are both represented and the Temporal bones from the thicker skull, also pieces of mandible and teeth.
- Individual 51A - Fragment of chin and body of mandible of a young child.
Sockets present for deciduous incisors, canines and first molars of both sides, all of which have erupted into function. Developing crowns of permanent incisors and canines present in their crypts. Small crypts for R premolar is empty but size shows that this tooth was in early stages of development.
- Individual 51B - Tiny fragment of a small mandible includes point of chin.
Socket of erupted left lateral permanent incisor and half of the crypt of a developing permanent left canine with the tooth *in situ*.
- Individual 51C - Small fragment of anterior part of mandible present, includes part of chin.
Six sockets present, but extremely shallow due to gross resorption of alveolar bone, resulting from periodontal disease. Probably three incisors, both canines and molars. One incisor lost *in vivo*; at least two premolars lost before death.
Dentition in last stages of disintegration, surviving teeth held only by tips of apices.
- Vertebrae - Several fragments.
- Sacrum - A piece.
- Forearm bones - Most of the shafts (less extremities) of a R radius and ulna, the lower end of the shaft of a R radius of a medium sized person.
- Hands - Fragments of a carpal phalanx, and the shaft and head of an adult metacarpal.
- Innominate bones - Part of a R with part of the hip joint - adult (perhaps the same individual as the R ulna and radius).
- Femora - R upper one-third and L upper two-thirds (less epiphyseal portions) of an adult of heavy build. Two pieces of a young femur - probably a R. The lower epiphysis is missing - age probably around 7-10 years.
- Tibia - A piece of shaft (? adult).
- Skeletal fragments - Many small fragments of long bones from all individuals
- Age at death Indiv 51A - 2-3 years, (dental development)

- Indiv 51B - 6-8 years, (dental development); 7-10 years (based on femur)
Indiv 51C - Mature or elderly adult, (dental estimate).

Cist 52

- Skull and dentition - None
Clavicle - The lateral end and part of the shaft of a R.
Vertebrae - A vertebral body (? an upper cervical), not fully ossified and the age therefore under 20 years, also fragments of other vertebrae.
Ribs - Fragments only.
Innominate - A piece, probably from L ischium.

Cist 54

- Skull and dentition - Pieces of skull, broken before being crushed together in clay, in a random fashion, prior to inhumation. 2 petrous temporal bones, and very thin calvarial bone fragments; piece of mandible and several teeth also in clay. Weathered fragments of bone.
- Some teeth loose, some in clay mass; R posterior regions of maxilla and mandible, with teeth still in occlusion. Teeth that had had erupted into function were EDC 6EDC. The 6/ was in process of erupting but had not yet reached the occlusal plane. Crowns of developing premolars could be observed beneath the deciduous molars, and the developing crowns of 7/7 were lying behind and deep to 6/6.
It was possible to preserve 6ED together with the developing crowns of 6ED 7 together with developing crowns of 54 in their original positions in the mass of soil and crumbling bone; consolidated with PVA. Fragment of maxillary R alveolus too friable and could not be preserved with teeth *in situ*.
Deciduous molars in functional positions, unworn; maxillary permanent first molar was erupting but not yet in functional position. 16 functional deciduous teeth; 25 developing permanent teeth. Presence among the deciduous teeth of several incisors showed that only the mandibular permanent first molars had reached a functional position. Teeth well formed and calcified; no evidence of hypoplasia; no caries.
Femur - Fragment and Unidentified bones, all from young child's skeleton
Age at death - 5 1/2 years (dental estimate); under 10 years (anatomical estimate).

Cist 56

Skull and dentition

- A few fragments including the L mastoid process and R maxilla and teeth were found. Greater part of mandible, intact except for ascending ramus and angle; small piece of alveolar process from maxilla. Poor state of preservation.

Teeth present

- 26 permanent teeth present, some fragmentary. all molars heavily worn, even third molars showing secondary dentine on occlusal surfaces, perhaps for occupational reason; other teeth less heavily worn. First molar present on R side of mandible; second lost during life and a large abscess or cyst cavity is present in its place; this abscess has involved the distal root of the first molar. No sign of third molar and a pitted area of bone behind the abscess cavity suggests that this tooth was lost during life. Slight moderate horizontal loss of alveolar bone due to periodontal disease, most marked round the premolars and molar on the R side of the mandible; no evidence of dental caries.

Vertebrae

- Cervical vertebrae probably C3-C7) were found in a lump of soil containing the mandible.
There were also several other fragments.

Ribs

- Pieces of 3.

Scapula

- L piece of glenoid and acromion (in 2 pieces).

Humerus

- R lower half of shaft less condyles.
L 2 pieces less upper end and most of lower end - of stout build.

Radius

- Part of the lower end of a R and a piece of shaft.

Ulna

- L in 6 pieces of fairly stout build.

Hand bones: Carpals

- L hamate and lunate, and pieces of 2 others.

Metacarpals

- L 3rd, R 1st, 4th and 5th and shafts of 3 others.

Phalanges

- Pieces of 8.

Innominate bones

- 2 pieces, L 3 pieces, each with a portion of Hip Joint.

Femora

- Pair of stout build and heavy muscular markings (R - L = 44cm).

Tibiae

- Pair, damaged - also of stout build.

Fibulae

- Pair, in pieces.

Patellae

- Pair, damaged.

Foot bones

- Almost all from R foot - talus, calcaneus (part of), navicular, medial cuneiform and a fragment (? intermediate cuneiform), 3rd, 4th and 5th metatarsals and the shaft of another. The phalanges, however, numbered 6 proximal, and both big toe terminal phalanges were found.

Height

- 167.5 cm - 170 cm

Sex

- Male, adult

Age at death

- 50-60, (dental estimate).

Cist 57

Skull and dentition

- No skull
- One permanent maxillary R central incisor present. Degree of attrition moderate. Slight hypoplasia line halfway down the crown, indicating a metabolic upset at the age of approximately 3 years.

Vertebrae

- C2 vertebra in 3 pieces, another vertebral body fragment.

Clavicle

- Shaft of a R.

Radius

- Piece of a shaft, and part of distal end of a R.

Ulna

- Piece of shaft of a L.

Hand

- Head of a metacarpal.

Ribs

- Two pieces.

Innominate

- Three pieces of a L.

Femora

- Two femoral heads and pieces of shaft.

Tibiae

- Pair, both lacking proximal ends - probably post-excavational trauma.

Fibulae

- Six pieces from 2 bones (? pair).

Feet

- Pairs of talus and calcaneus - all damaged - and a piece of Cuneiform.

Age at death

Adult, but not elderly, (dental estimate).

Cist 58

Skull and dentition

- No skull
- One mandibular R molar, may be either second or third; damaged by *post mortem* chipping of enamel. Moderate degree of attrition.

Vertebrae

- C1, C2 and fragments of 2 more - ? upper thoracic.

Rib

- One piece.

Forearms

- Piece of a R ulnar shaft and 2 pieces of shafts (? radius and ulna).

Hands

- base of metacarpal, 4 phalanges and of 6 carpals.

Innominate

- assorted fragments of 2 hip joints.

Femora

- Shafts only of a pair - both broken - and 2 femoral heads.

Metatarsals

- Shaft and base of R 4th.

Fragments

- Tibiae and other unidentifiable fragments

Age at death

30s, (dental estimate)

Cist 59

Skull and dentition

- Various fragments of calvarium, squamous part of occipital bone, parts of R and L temporal bones. The sutures were mostly fused internally but not externally.

Teeth present

- Part of left body and ramus of mandible present, with all premolars and permanent molars in situ. Parts of another 5 mandibular teeth and of 4 maxillary teeth also present, all canines, premolars or molars; incisors represented by small slivers of enamel.

Third molars have erupted and have been in function for some time. Degree of attrition relatively slight; no evidence of caries, nor of periodontal disease in the small mandibular fragment.

Vertebrae

- Pieces of several Vertebrae were embedded in hard soil.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Scapula - A glenoid portion, and the root of the acromion process of a L
- these may not be from the same individual.
- Humeri - Shaft of a R and most of a L - a pair.
- Forearms - Head of a radius (2 pieces), shaft (2 pieces) of radius? L
Proximal half of a L ulna (in 2 pieces) and part of distal end of
an ulna?
- Hands - Parts of 2 carpal phalanges.
- Rib - A fragment.
- Innominate bone - Several pieces, including L ilium.
- Femora - Upper one-third of an adult L, piece of a shaft (?L), head of a
R, parts of the lower ends of a R and a L.
- Tibiae - Two pieces each of R and L - lower ends missing.
- Fibulae - Two pieces of shafts.
- Foot - Part of L calcaneum.
Long bone shaft fragments, unidentifiable
- Age at death - c20-25 years, (dental estimate)

Cist 63

- Skull and dentition - Of the skull itself there were the mastoid process of a L
temporal bone and several pieces of calvarium, including the
torcular portion of the occipital bone which showed a markedly
raised superior nuchal line which suggests well developed
posterior neck muscles.
- 2 teeth present, mandibular left second and third permanent
molars; some attrition.
- Femur - Pieces of a L.
Some much broken pieces of long bones possibly represent a
tibia and fibula.
- Age at death - 30-35 years,(dental estimate).

Cist 64

- Skull and dentition - 2 pieces of the torcular portion of the occipital bone
- one heavily worn R maxillary permanent molar, which may be a
second or a third; some attrition. Small fragment of R body of
mandible, contains one very shallow molar socket. Evidence
other teeth in mandible had been lost before death; probably
severe periodontal disease was cause of in vivo tooth loss.
- Age at death - 40s, (dental estimate)

Cist 66

Skull and dentition

This is large, rounded with prominent supraorbital ridges. It was very well preserved with a complete dentition. The calvarial region is not thick. There is a break - ? a line of a fracture. Starting from two-thirds up the R parietal, this proceeds down to the R squamo parietal suture, thence forwards and downwards to the greater wing of the sphenoid, passing (bisecting) across the foramen ovale and across the skull base just anterior to the spheno-occipital synostosis; thence it passes backwards via the temporo-occipital suture, jugular foramen, L occipital condylar canal and then upwards to meet the L limb of the lambdoid suture. There is a slight depression at the R pterion which may indicate the site of impact of a weapon; this dent, a break in the R zygoma, and a broken (probably *antemortem* fracture) R mandibular coronoid process are all in line.

Maxilla and mandible are both almost complete. The maxilla posses a broad, deep palate and the mandible is quite large with well-formed muscular processes, slightly everted angles and a very prominent chin.

All 32 permanent teeth are present in normal functional positions. The dental arches are broad and well-formed and the fairly large teeth have been accommodated with only minimal crowding in the incisor regions. The occlusion is perfect and the incisors have developed an edge-to-edge bite.

The third molars have developed wear facets and thus have been in function for a little time. The degree of attrition is slight, suggesting an age of 20-25 years. The differential in wear between the molars is less than usual and this suggests that the rate of attrition was slower than normal - perhaps the individual consumed a softer diet than his contemporaries. If attrition was slower than usual, then a slightly higher estimate of should be given, perhaps 23-28 years.

No evidence of dental caries. The greater part of the dentition is also free of periodontal disease, but small periodontal pockets between the second and third molars in all quadrants show that this condition was just starting to develop. There is no hypoplasia of any teeth, but two deep imbrication lines close together in the enamel of the incisors and canines suggest some minor metabolic upset at the age of 3-4 years.

Hyoid bone

- Most of this is present.

Vertebrae

- All cervical, all thoracic (nos 1-7 show erosion of fronts of bodies) are present. Lumbar Vertebrae 1-3 lack bodies, 4 and 5 are damaged. The neural arch of L 4 does not articulate easily with the others (?was it abnormal).

Sacrum

- Five segments - fusion is not quite complete between S1 and S2 bodies.

Sternum

- The manubrium and 2 pieces of the body.

Ribs

- A full set is represented.

Clavicles

- A pair, the epiphyses at the sternal ends are just fused.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Scapulae - Pair - epiphyses are fully fused.
- Humeri - Pair - good muscular markings. R = 34.1cm, I = 33.5cm, adult.
- Radii - Pair, adult R = 25.4cm, L = 25.2cm.
- Ulnae - Pair, adult.
- Carpals - Only L trapezium, L hamate, and L triquetral are missing.
- Metacarpals - Only L 1st metacarpal is missing.
- Phalanges - Three intermediate, and 5 distal phalanges are missing.
- Innominate bones - Pair - broken almost all of R pubis is missing.
- Femora - Pair, R = 46.6cm, L = 47.4cm.
- Patellae - Pair.
- Tibiae - Pair, R = 37.5cm, L = 37.5cm.
- Fibulae - Pair.
- Tarsals - The R 3rd cuneiform is missing, and there is a little doubt as to whether another piece of bone is the R 2nd cuneiform - otherwise a full set is present.
- Metatarsals - A full set is represented.
- Phalanges - A pair of 1st proximal phalanges and 5 others are present.
- Height - 171 cm - 177 cm
- Sex - Male
- Age at death - 25-28 years of age; died from a blow to the R side of his head - a weapon seems more likely than a fall. **Illustration A1**

Cist 67

This burial was complete, but working conditions were so bad because of frost that only the bones listed below were removed and the rest were left in the ground as they could not be removed undamaged.

Skull and dentition

- This was very fragile. The calvarium was long, narrow and thin; the sutures were fused internally and almost so externally. The frontal sinuses are extremely small. The R mastoid process is damaged but the L mastoid process is small. The maxillae and sphenoid were not obviously present. Several small pieces of bone and a piece of the L side of the sphenoid bone (body and base of great wing carrying the 3 foramine-rotundum, ovale and spinosum) were in the skull.

Two small fragments of both sides of the body of the mandible are present, with the sockets for the molar teeth. Two molars still *in situ* on R side. Further 7 mandibular and 12 maxillary teeth also present.

- The mandibular third molars have erupted into functional positions and the apices of the roots are fully formed. There is less attrition of the dentition than would be expected in view of the degree of closure of the cranial sutures. The amount of wear of the teeth suggests an age of 25-30, while the cranial sutures would indicate a somewhat older individual.

The teeth have not been affected by caries. The small fragments of alveolar bone which are present show no evidence of periodontal disease. Marked lines of imbrication on the crowns of the second premolars may indicate a minor metabolic upset at about the age of 6 years.

Scapula

- The vertebral border of a R.

Hands

- Pieces of 3 metacarpals and part of an intermediate phalanx.

Sex

- Female

Age at death

30-35, 9estimate based on sutures); 25-30, (denta estimate).

Cist 69

Skull and dentition

- This was very fragile. The calvarium was partly retained in position by the soil inside. In shape it was a long oval and not very thick. The supraorbital ridges were more marked medially than laterally and the frontal air sinuses were relatively small. The nose was possibly prominent and uptilted. The mastoid processes were well formed with deep digastric grooves. sagittal, coronal and lambdoid sutures were closed internally and externally.

- The greater part of the alveolar processes of the maxilla and the palate and the bulk of the mandible are present. Only one permanent tooth has been lost *post mortem*, and 24 of the 31 teeth present were in or could be returned to their sockets. There is quite heavy attrition of the maxillary molars, though the mandibular molars show less wear. The most likely age is probably in the late 20-early 30s.

No dental caries; moderate degree of periodontal disease which has affected the molar regions most severely, with the formation of periodontal pockets round one or more molars in all quadrants.

Marked lines of imbrication on the crowns of the canines may indicate a minor metabolic upset at the age of 5-6 years

Vertebrae

- Cervical 1st broken, 2nd more or less intact and fragments of 3 or 4 more thoracic. Ten or 11 are represented (all damaged). lumbar fragments only.

Sacrum

- Fragments.

Sternum

- Part of upper part of body.

Ribs

- Ten R and 9 L are represented plus other fragments.

Scapulae

- Pair in various pieces.

Clavicle

- Pair, damaged.

Humeri

- Pair, damaged. L approximately = 32.8cm, R broken.

Radii

- Pair, R broken into pieces, L lacking head.

Ulnae

- Pair, R broken into pieces. L complete in 2 pieces.

Carpus

- Both lunates a scaphoid and a capitate are represented and fragments.

Metacarpus

- Five pairs are represented - many are damaged.

Phalanges

- Five pairs proximal and 6 intermediate carpal phalanges.

Innominate bones

- Both R and L lack the ischio-pubic rami and have other damage. They may be female.

Femora

- Pair - muscle markings are good but the shafts are moderately slender. R = 45.0cm, L - 45.4cm.

Patellae

- Pair.

Tibiae

- Pair - not of heavy build, but show very well marked "squatting" facets at lower ends. R = 36.3cm, L = 36.3cm. There is a 4" round defect through the cortex into the underlying cancellous bone on anterior aspect of the lower end of R just above the squatting facet. It may have been caused by a tumour. **Illustration A6.**

Fibulae

- Pair, represented by the lower ends and pieces of shaft.

- Tarsus - Calcanei a pair. The R talus shows "squatting" facet extending well forward onto the neck of the talus and the surface for the medial malleolus of the tibia extends unusually far forwards. A fragment may be part of the head of the L talus. Also present were the L navicular and all 3 R cuneiforms.
- Metatarsals - R 1st, 2nd, and 5th, L 1st, 3rd and 5th.
- Phalanges - Only a 1st proximal (?R) was found.
- Height - 164cm -169 cm if female; if male, 168 cm - 173 cm.
- Sex - Possibly female
- Age at death - 28-34 (dental estimate); cranial sutures suggest a little older.

Cist 70

- Skull and dentition - This is very thin and fragile. The facial skeleton was distorted in position. Nothing remained of the supraorbital region. Basically the basi-occiput and both petrous temporal bones remained but both mastoid processes were broken off.

Teeth present

- Two small fragments of the body of the mandible remain. The mandible appears to have been small and of delicate build; the two molar sockets carried by the remaining fragments are shallow, indicating considerable loss of alveolar bone by resorption. Nine loose permanent teeth are present; all but one show severe attrition; two molars worn right down to the neck of the tooth. One tooth, which appears to be a very small upper third molar, is almost completely unworn and this indicates the tooth had never been in function. It may have been partially embedded in the jaw.

No evidence of dental caries; there may have been periodontal disease, but the loss of alveolar bone may be partly due to age.

Vertebrae

- Remains of 2 cervical vertebrae (? C3 and C4) were found when removing soil from the skull. Fragments of other vertebrae (? thoracic) were found.

Ribs

- A few fragments only.

Arms

- Fragments of a ? humerus shaft, an ulna and of 2 phalanges.

Innominate bones

- Pieces of both, including parts of both acetabula.

Femora

- R broken and incomplete, L broken but = 40.8cms approximately.

Tibiae

- R proximal two-thirds, L proximal one half.

Fibula

- Two fragments may be from fibulae.

Patella

- One damaged (? L).

Tarsals

- One damaged (? 2nd).

Metatarsals

- The shafts of R and L 1st.

Height

- 156 cm-157.6 cm

Sex

- Female

Age at death

- 50 plus.

Cist 71

Skull and dentition

- No skull
- The crowns of three permanent teeth are present, the roots having been destroyed post mortem. The teeth have been identified as the maxillary R first permanent molar, the maxillary L second premolar and the maxillary L second permanent molar. The second molar shows a very small distal wear facet, which suggests that the third molars had erupted a short time before death. Occlusal wear of all three teeth is slight.

Age at death

- Late teens- early twenties (dental estimate).

Cist 72

Skull and dentition

- This was very fragile and broken. The cranial cavity was filled with soil and pebbles. The calvarium is very thick (up to 10mm over frontal, parietal and squamous occipital parts). The frontal sinuses and mastoid processes are well developed.
- Fragments of both maxillary alveolar processes and of the R body of the mandible are present; 14 permanent teeth *in situ*; a further 13 permanent teeth survive.
- The teeth show moderate to fairly heavy wear. A small defect in the buccal surface of the mesial root of a lower first molar may be a very early carious lesion. Moderate horizontal resorption of alveolar bone, suggesting a mild degree of periodontal disease.

Vertebrae

- Two fragments only are recognisable.

Ribs

- A few small pieces.

Scapula

- R some pieces.

Clavicle

- R some pieces.

Humeri

- R and L both present but broken.

Radius

- The head of a ?R.

Ulnae

- Proximal ends of a pair. They are large but the cortex is not very thick.

Carpus

- only one triquetral, one capitate and one pisiform.

Phalanges

- four proximal and 3 intermediate phalanges.

Femora

- Pair, both damaged. R too much damaged for measurement, L = 46.1cm approximately.

Tibiae

- Pair both damaged. R = 36.6cm, L = 36.6cm approximately.

Fibulae

- Pair damaged.

Patellae

- Pair.

Tarsus

- Paired sets - L talus and calcaneus, and R 2nd cuneiform are badly eroded.

Metatarsals

- Only L 4th is missing.

Phalanges

- Both R 1st phalanges and 5 others are present.

Height

- 169.2 cm- 174.6 cm

Sex

- Male, adult

Age at death

- 30-35 years, (dental estimate)

Cist 73

Skull and dentition

- Both temporal bones and the torcular part of a rather thin occipital bone and some other pieces of skull were present.
- Parts of the L. ramus and body of the mandible, carrying the three permanent molars and the second premolar, the maxillary L. first and second incisors, and the second and third molars are also present. The molars all show heavy attrition; wear of the mandibular first molar is so irregular as to suggest that there was some anomaly of the occlusion in this area. the second premolar is also lying in an abnormal position, tilted partly below the mesial marginal ridge of the first molar.

Humerus

- Part of a R.

Forearm bones

- Some broken pieces.

Age at death

- late 40s - 50s.

Cist 74

Skull and dentition

- The Mandible was more or less complete. The maxillae were both present though separated and damaged. The calvarium was more or less complete and the base also as far forwards as the body of the sphenoid but deficient anteriorly. The R zygoma and several other skull fragments were found separately. the calvarium was oval with a broad frontal region, well marked supraorbital ridges and mastoid processes.

Teeth present

- the mandible is almost complete, with a full complement of 16 permanent teeth. The alveolar processes of the maxilla have survived though the rest of the bone is missing or damaged. 16 sockets are present in the maxilla, but three of the incisors have been lost *post mortem*.

There is fairly heavy attrition, particularly of the molars. No evidence of caries; slight resorption of the alveolar bone has occurred; none of the signs of gross periodontal disease; teeth well calcified; show no evidence of hypoplasia.

Vertebrae: Cervical

- 2, 3, 4, 6 and 7 were found and piece possibly from C1.

Thoracic

- 1, 2 and 3 were separate - their epiphysial rings had fused to the bodies therefore age was over 25 years.

Lumbar

- Further vertebrae down to T12 and the 5 lumbar vertebrae were present in correct order and so they were not completely cleaned but no obvious abnormality was found.

Sacrum

- Segments 1 and 2 were complete and there was also a part of S3. The intervertebral disc cavities were still present but the lateral masses had fused - confirming the age as more than 25 years.

Sternum

- Parts of manubrium and body.

Hyoid bone

- The body.

Ribs

- 12 R and 12 L ribs were recognisable plus a number of fragments.

Scapulae

- R and L in pieces of good size and fully adult.

Clavicles

- Pair, long and strongly curved.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Humeri - Pair. R has a noticeably heavy build heavier lower end = 35.7cm; L = 34.5cm
- Radii - Pair. L is broken (3 pieces), R seems longer and = 26.5cm.
- Ulnae - Pair. L is broken.
- Carpus - R capitate, lunate, and triquetral, the 1 trapezoid and both pisiforms are missing. The others are all present.
- Metacarpals - Five pairs are represented - mostly damaged.
- Phalanges - Proximal - 3 pairs and 2 singles
Intermediate - 3 pairs and one single
Terminal - 5 only.
- Innominate bones - Pair - broken - both pubic regions damaged. The R side is probably male. The cristal and ischial epiphyses are fused.
- Femora - Pair. R = 45.7cm, L (broken) = 46.2cm approximately.
- Patella - R only.
- Tibiae - Pair, no squatting facets. R = 38.1cm, L = 38.4cm.
- Fibulae - Pair, L broken.
- Tarsus - Pairs of talus (damaged) and calcaneus and a R navicular.
- Metatarsus - R 1st, 3rd and 5th are broken, there are also pieces of L 1st and another.
- Phalanges - Two proximal, one intermediate; also the distal phalanx of a big toe.
- Height - 171 cm - 176 cm (calculation from leg bones) or 176 cm - 180 cm (calculated from arm bones).
- Sex - Male; well-built
- Age at death - 28-35 (anatomical estimate), 30-35 (dental estimate).
- Cist 75
Skull and dentition - 7 pieces of occipital and parietal parts of a thick heavy calvarium
- Cist 76
Unidentifiable "crumbs" of bone
- Cist 77
Incomplete remains
- Metacarpal - The base of a metacarpal - probably L 2nd.
- Radius - A piece that may be part of the head of a human radius.
- Femora - L - pieces of shaft - epiphyses not united
- lower epiphysis of a L
- fragment of lower end of shaft of a L
R - pieces of shaft - epiphyses not united
- lower epiphysis of a R.
- Patella - Part of a patella
- Tibiae - L - pieces of shaft
- upper epiphysis of a L
R - shaft of a R
- upper epiphysis of a R.
- Fibula - A fragment.
- Age at death - c12 years

NB

was found in a bag of animal bone fragments (Bag 77/7 or G9/3)

Cist 78

Skull and dentition

- The cranial cavity was completely filled with soil, teeth, part of an upper cervical vertebra, and 2 pieces of mandible.

Illustration A12.

- The maxilla is fairly well-preserved; full complement of developing deciduous and permanent teeth present. Only a few mandible fragments and six teeth.

From maxilla can be seen that deciduous incisors, canines and first molars have erupted; slight wear facets indicate that they were functional. Deciduous second molar have barely reached the occlusal plane and are completely unworn: just erupting.

Only roots of deciduous central incisors have formed completely. The deciduous lateral incisors have open apices; roots of deciduous canines and deciduous molars incomplete.

Developing crowns of three first permanent molars and of all four permanent maxillary incisors present; X-rays show that the permanent canines and first premolars are developing within the maxillae. the second premolars have not yet started to calcify.

Vertebrae

- There were neural arch pieces to represent 22 vertebrae and centra for 12. As the single cervical arch found, and the thoracic and lumbar arches have fused across the midline, but none have fused with the centra, the age is probably around 24 months.

Sacrum

- Four centra and several other pieces were present.

Ribs

- Pieces representing 11 L and 8 R were identified and several other fragments also.

Clavicles

- Pair - represented by 3 pieces.

Scapulae

- Most of the R and 3 pieces of the L.

Humeri

- Pair of shafts only - no epiphyses - 11.8cm in length.

Ulnae

- Pair - each in 2 pieces.

Radius

- R - its lower half in 2 pieces.

Innominate bones

- The normal 3 segments of each side.

Femora

- Pair of shafts only - no epiphyses - 15.3cm in length.

Tibia

- L - proximal half (less epiphysis)

?R - mid third of a shaft.

identified bone fragments.

Sex

- Child

Age at death

- 20-24 months, (development of mastoid); 1 1/2-2 years, (development of teeth).

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

Cist 81

- Ulna - R, fragment.
- Carpal phalanx - Fragment
- Fibula - L, lower end, recent union of epiphysis.
- Calcaneum - L, part.
Unidentifiable fragments
- Age at death - 18-19 years

Cist 83

Unidentifiable fragments of bone

Cist 84

- Tibia - R, possibly; much eroded part of the shaft

Cist 85

- Tibia - L, 3 pieces of shaft and the lower end
Unidentifiable fragments

Cist 87

- Skull and dentition - Fragile, fragmented, no facial skeleton remained. Calvarial fragments not thick; sutures completely unfused.

Scapula

Humeri

Both, slender; cortex of medium thickness; muscle markings not prominent

Ulna

R

Pelvis

Fragments;

Femora

Fragments; slender; as humeri.

Tibiae

Fragments

Sex

- Female, possibly

Age at death

- 25-30 years.

Cist 88

Skull and dentition

- This skull is broad and rounded. The anterior part of the calvarium has been crushed downwards and forwards. The basal skeleton is all present as far forward as the sphenoid and vomer. The calvarial bones are fairly thick; the sagittal suture seems to be partly fused but the lambdoid suture is not. The mastoid and styloid processes are large.
- Two small parts of the body of the mandible are present and a fragment of the R maxilla. 13 permanent teeth are present. The degree of attrition is slight; however assessment of age is complicated by the presence of gross dental caries. Caries has caused the destruction of the greater part of the crown of both mandibular permanent first molars, with exposure of the pulp and resulting very large abscesses in the alveolar bone. The only other mandibular molar present, R second molar, has a smaller carious cavity and in this tooth it is possible to observe that the initial lesion must have been in the occlusal fissure. This is a common site of carious attack at the present day, but in earlier times occlusal caries was rare and the usual site of attack was at the neck of the tooth. There is reason to believe that the lesions of the first molars may also have been of the occlusal type originally. Two upper molars are free of caries, but the maxillary left second molar shows an early lesion of the more usual type at the neck of the tooth. The presence of such very large carious lesions on both sides of the mandible probably reduced masticatory ability of the individual considerably, and the age at death was probably higher than the degree of attrition would suggest. The general deterioration of the alveolar bone and the presence of large abscesses in the mandible precludes any assessment of the periodontal condition.

Vertebrae

- Cervical 1st and 2nd and pieces of C 4th and 5th are recognisable plus several pieces which may be from lumbar vertebrae.

Hyoid Bone

- The body.

Humerus

- A piece of a shaft.

Forearm bones

- Three pieces of shaft.

Carpus

- A R scaphoid, and L lunate and triquetral.

Metacarpals

- The bases (damaged) of probably R 4th and 5th.

Phalanges

- Four proximal, 4 intermediate and 2 terminal.

Innominate bone

- Pieces of a R.

Femora

- R in 5 pieces, of heavy build with good muscle markings.
L - 3 pieces of shaft.

Tibiae

- Both are represented by pieces.

Fibulae

- Both are represented by pieces of shaft.

Tarsus

- Pieces of talus and calcaneus - much broken, and a broken 2nd cuneiform (?L).

Sex

- Male

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

Age at death - Early twenties, (dental attrition, but older on other dental considerations); upto 30, (anatomical assessment).

Cist 90

2 small unidentifiable fragments.

Cist 93

Tibia

fragment

various small, unidentifiable fragments

Cist 96 (F6)

/NB Animal bone (Appendix) as well as human were found in this burial.

Skull and dentition

- R petrous -temporal, piece of another petrous -temporal, L possibly.

- No jawbone fragments. The crowns of 25 permanent teeth are present, and a small fragment of another.

The crowns of the second molars show early wear facets, indicating that these teeth have been in function. The crowns of the third molars however are completely unworn, and the appearance of the enamel suggests that these crowns had been complete for a relatively short time. Unfortunately the roots of all teeth have been destroyed *post mortem*, so an exact estimate of age is difficult; no evidence of caries and the periodontal condition cannot be assessed. The central incisor (only one present), all four canines and the first molars of the R side show a moderate degree of hypoplasia of the enamel, with quite deep stained pits. The mandibular left first molar is less severely affected and the maxillary left first molar is not present. The positions of the hypoplastic crowns suggest a fairly severe metabolic upset at the age of c9 months- 1 year. This could have been illness or severe malnutrition.

Femur or tibia

2 pieces of small size, shafts, possibly

Age at death

- 14-19 years, (dental and anatomical evidence).

Cist 97

Skull and dentition

Teeth present

- No fragments of jaw. The crowns of two upper molars are present, together with part of the crown of a lower molar and some enamel fragments, too small to identify.

The upper molars are most likely to be the maxillary second molars but could be the third molars. The lower molar may be the R third.

Unidentifiable bone fragments.

Age at death

- Mid-twenties, if the identification of the maxillary molars is correct; if they are third molars then the individual would be older

Cist 98

Skull and dentition

- Part of a R temporal bone (with temporo-mandibular joint surface and the external auditory meatus) and a part of the mandible and some teeth are present.

The first and second permanent molars are *in situ* and the root apices of the second molar appears to be complete: an X-ray shows that the apices are fully formed. Behind the second molar is the empty crypt for a developing third molar. The developing third molar from the R side is present and shows a stage of early root development.

Parts of 14 additional loose teeth are present. When all the teeth are examined there are some marked discrepancies in size and morphology between pairs of teeth from opposing sides, and smaller but quite noticeable differences in degree of attrition and stage of development of third molars. although there appears to be no duplication of teeth, which would be expected if two individuals were present, these discrepancies are of such magnitude as to suggest the possibility. If this is so, then the older would be 14-16 and the other perhaps two years younger. (No bones duplicated).

There is no evidence of dental disease and the teeth are all well-formed and calcified.

Humerus

- The lower end less epiphyseal portions of a R and some possible fragments.

Radius

- A piece of the upper shaft of a ?R.

Ulna

- The proximal end less epiphysis of a R.

Innominate bone

- Some small pieces.

Femur

- The lower half of the shaft and its separated lower epiphysis of a R.

Tibiae

- Parts of the upper shaft (less epiphyses) of R and L.

Bones are fragile, from a small built young person

14-16. (anatomical and dental evidence).

Age at death

Cist 99

Skull and dentition

- Little more than the facial parts, 2 temporal bones and some fragments of calvarium persist. The facial and jaw bones and teeth were embedded in a block of hard soil and other tooth fragments were found.

Part of the L mandible, with probably the L canine and L premolar *in situ* and a sliver of the lower border of the R body of the mandible are present; in addition there are parts of 11 more teeth and unidentifiable fragments.

The teeth are heavily worn ; three molars have been affected by dental caries, with small to moderate cavities, in one case so heavily worn that the pulp may have been involved. At least three teeth were lost *in vivo* but the evidence does not show whether this derived from dental caries or from periodontal disease. Where the teeth were lost the bone had healed well.

Vertebrae

- One fragment.

- Humerus - The lower end of the shaft of a R less the articular surfaces.
Forearm - The proximal end of a R ulna and a fragment of the upper end of a R Radius shaft.
Femora - Four pieces of shaft.
Tibiae - Three pieces of shaft.
- Unidentifiable fragments
Sex - Possibly female
Age at death - 40 -45 years, (dental evidence).

Cist 100

- Skull and dentition - This was crushed and fragmented. But from the temporal bones and the frontal sinuses with a prominent supraorbital region this was probably a male.

- Humerus (or Femor) - Part of the head

- Sex - Male
Age at death - Over 50, (dental evidence).

Cist 102

- Skull and dentition -
- Part of shaft of a long bone - not identified

Cist 104

- Humerus - part of the lower end of the shaft, piece shaft, possibly humerus, part of the head of a ?humerus.

- Femur - 6 pieces of a femoral shaft?
- Unidentified fragments of bone

Cist 107

- Skull and dentition - The skull was fragile. Most of the facial skeleton was missing but portions of mandible with teeth (some *in situ*) and one small piece of maxilla were found. The coronal and sagittal sutures were fully fused - the latter, almost obliterated, was deviated to the R of the midline. The L mastoid process is fairly large.

Most of the mandible, but only a tiny fragment of the maxillary alveolous is present. Twelve permanent teeth *in situ* in the jaw and 12 other loose teeth.

Teeth have all been in function and show moderate amounts of wear. The degree of attrition is greater on the R than on the L, which affects age estimates; one molar has an occlusal pit, perhaps resulting from arrested caries. Slight horizontal bone resorption in the molar area of the mandible, may be seen as an age change. The anterior region of the mandible is damaged, but there is an indication that periodaontal disease may have been present in this region. The teeth are very large.

- Vertebrae - Fragments only.
Upper limbs - Were only represented by pieces of 4 metacarpals, a lamate and a damaged capitate.
Innominate bones - Portions of both included parts of the acetabula.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Femora - Pair, showing marked anterior bowing and heavy muscular markings. The R lacks part of the head and the neck is broken. The L is damaged at the trochanters but measures 44.2cm
- Patellae - Pair.
- Tibiae - Pair - both are damaged at the upper ends, but the L = 35.0cm approximately. Above and behind the L medial malleolus there is a bony projection and another bony excrescence (about 5mm in circumference) about 3 cm higher up. These may indicate an old healed fracture of the medial malleolus. **Illustration A4.** Below the lower of these 2 bony projections there is a small smooth area - perhaps due to a sesamoid in the tendon of tibialis posterior muscle.
- Fibulae - Pieces of shaft and an upper end.
- Feet - Talus (L), calcanei, a pair (both damaged), cuboid (R), navicular - a L. and a piece of a R, and a pair of medial cuneiforms were all present; metatarsals R 1, 2, 3 and 4 and L 1345 (all damaged) were present along with a big toe proximal phalanx and a piece of another.
- Pathology - There was a 'figure 8-shaped' defect in the L parietal near the upper anterior angle. The edges were bevelled internally. There was also an unusual vascular sulcus leading upwards towards the sloping lateral margin of the defect, and a slight ridge of roughened bone ran transversely just posterior to the coronal suture. **Illustration A7.** These findings are suggestive of a tumour such as a meningioma or a metastatic cancerous tumour.
Old healed fractured ankle
- Height - 165 cm -170 cm (probably nearer the upper figure)
- Sex - Male
- Age at death - 30-40 years, on anatomical evidence; 30-35 years, or less, based on dental evidence.
- Cist 108
- Skull and dentition - Pieces of calvarium, 2 Temporal bones, and some jaw and tooth fragments.
Tiny fragment of maxillary alveolus carrying a premolar and two permanent molars; three mandibular molars are also present. The teeth have all been in function; slight degree of attrition.
Evidence indicates upper R third molar congenitally absent; R mandibular third molar is very small.
Discoloured depressions on the occlusal surfaces of upper and lower second molars are probably arrested lesions.
- Humerus - Fragments
- Tibia - Fragments
- Fibula - Fragments
- Femur - Fragments
- Age at death - Unidentifiable fragments
- 20-25 years

Cist 109

- Skull and dentition -
- Humerus - Fragments
- Tibia - Fragments
- Feet - Calcaneus, fragments
- Unidentifiable fragments

Cist 110

- Skull and dentition - The calvarium is broken and the sutures are separating. The calvarial bones are thick and heavy; the mastoid processes are not large but the supraorbital ridges are prominent and contain fairly large frontal sinuses.

Most of the facial skeleton has been lost but the body of the Mandible with 14 teeth is present; no maxilla, but two maxillary teeth survive. Teeth show heavy wear, especially the molars. Shallow surface erosions at the necks of two molars may represent very early carious lesions, or may be due to *post mortem* destruction.

Periodontal disease is moderate to severe especially in the molar regions: the mandibular first molar displays periodontal pockets which have extended to the bifurcation of the roots. There is no sign of the R mandibular third molar, but pitting of the bone surface behind the second molar suggests that this tooth was lost during life, with good bone healing and only slight residual infection.

Vertebrae

Fragments

Sacrum

- Fragments.

Hands

- A pisiform bone, 2 carpal proximal and one carpal terminal phalanx.

Femora

- Both, fragments

Tibiae

- Fragments of the shafts of 2.

Sex

- Male

Age at death

- 40-45 years, (dental estimate)

Cist 111

Skull and dentition

- The skull is broad and rounded, the sutures and wormian (sutural) bones are completely unfused. The calvarial bone is thin especially in the occipital region. The Mastoid processes are small and the digastric grooves are wide, deep, and extend farther posteriorly than usual, and are not subdivided into muscular and vascular parts. The mandible and the alveolar process are virtually intact and contain a full set of permanent teeth.

The root apices of the third molars are completely formed; there is very little wear of the teeth.

There is no evidence of caries or of periodontal disease. The maxillary R canine is malposed, lying slightly palatally to its correct position; the incisors are slightly crowded. This is probably to be associated with the narrow v-shaped palate. The teeth are well-formed and calcified.

- Vertebrae Cervical
- Thoracic
- Lumbar

- All are present though exhibiting various degree of damage.
- Eleven are represented in various degrees of damage.
- Three and a number of fragments are present.

Ribs

- Portions of 11 L and 10 R are recognisable plus assorted other fragments

Clavicles

- Pair - of light build.

Scapulae

- Pair - broken.

Humeri

- Pair - slender. The lower ends are damaged but the R seemed to have been approximately 1cm longer than the L which measured 32.7cm.

Radius

- Two pieces of a L.

Ulnae

- Pieces of both a R and a L.

Hands

- The following alone were present - capitate (L), lunate (L), metacarpals R 3rd, L 4th and 5th, and some other fragments, and 2 proximal, 3 intermediate, and one distal phalanges.

Innominate bones

- Part of a R hip joint region and some fragments.

Femora

- Pair - the R is intact and = 45.2cm, the L is broken. As all epiphyses are fully fused. This would indicate an age of at least 20 years if female and perhaps 2 years more if male.

Patellae

- Pair.

Tibiae

- Pair - both broken; adult.

Fibulae

- Three fragments.

Feet

- Only R calcaneus and a pair of talus (all 3 broken) and a L 3rd cuneiform were present.

Height

- 166 cm- 172.9 cm

Sex

- Female

Age at death

- 20 - 25 years

Cist 112

Skull and dentition

- The facial skeleton - less the zygomata which were separate - presented in full dental occlusion. There was a group of cervical vertebrae in normal articulated relationship inside the angle of the mandibular bodies. There was an almost circular (2.2 cm by 2.8 cm) defect in the upper anterior quadrant of the R parietal bone and another small oval defect (2.6 cm by 1.5 cm {coronally}) in the midline just posterior to the bregma thus involving both parietal bones. The margins of both defects are slightly rounded off and appear to have been made some time before death. On removing the soil the broken skull base and the calvarium fell apart. No pieces of bone matching the above holes were found. Internally the margins of the holes showed *no signs of splintering or radiating cracks.* **Illustrations 11a and b.** The mastoid processes are large, the styloid processes are broken but were probably quite long, the supraorbital ridges and glabella are prominent. The nose was probably large and prominent.

The mandible is almost complete but only the alveolar and palatal parts of the Maxillae have survived; a complete set of 32 teeth is present, all in functional positions. The teeth are in normal occlusion, well spaced in broad arches, with a minimum of crowding in the incisor regions. The mandible is well developed, with everted angles and a large chin. The apices of the third molars are fully formed.

The teeth are well formed and calcified and there is no trace of hypoplasia. There is no evidence of dental caries or of periodontal disease. *This is a really beautiful dentition.*

The left body of the mandible shows on its lingual surface a well marked depression just above the lower border and below the roots of the third molar. This is a rare anomaly but has been recorded in various populations (Harvey and Noble 1968). When examined in the living, these depressions were usually found to contain salivary gland tissue, possibly ectopic lobes of the submandibular salivary gland.

Vertebrae

- Cervical, 1-5 more or less intact plus a piece of C6.
Thoracic, 10 vertebrae and many fragments.
Lumbar, 1-5.

Sacrum

- Segments 1-5 show incomplete fusion between the bodies of 1st and 2nd, and between 3rd and 4th segments.

Hyoid

- The body and one cornu.

Sternum

- The manubrium and another fragment.

Ribs

- None were intact but elements of 10 R and 9 L were recognisable.

Clavicles

- Pair, broken - their size suggests a wide shouldered individual.

Scapulae

- Pair, broken, good size.

Humeri

- Pair, - heavy build with good muscle markings.

R (in 2 pieces) = 34.3cm, L = 33.2cm.

Radii

- Pair, R = 25.2cm, L broken, in 2 pieces.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Ulnae - Pair, R - intact, L broken in 2 pieces.
Both sets of forearm bones show good muscle markings.
- *Carpus - One scaphoid, one triquetral and one pisiform are missing; the rest are present.
- Metacarpals - Only the L 1st is missing.
- Phalanges - Only 3 terminal phalanges.
- Innominate bones - Both broken and incomplete. Male form.
- Femora - Pair - both broken at mid shaft. They are heavy bones with very thick cortex. R and L are approximately = 47.00cm.
- Patellae - Pair.
- Tibiae - Pair, heavy strong bones with slight lower squatting facets. The articular surface of a lower end suggests arthritis of the ankle joint. **Illustration A10.** R = 38.1cm, L = 37.9 cm.
- Fibulae - Pair, broken but complete
- Tarsal bones - One lateral and one intermediate Cuneiform are missing from an otherwise complete set.
- Metatarsals - Five pairs.
- Phalanges - Both big toes are complete, plus 2 and a half pairs of proximal phalanges and 2 intermediate phalanges, also present.
- Pathology - skull appears to have been trephined in two places some time before death. He had an arthritic ankle.
- Height - 172.17 cm - 176.5 cm
- Sex - Male
- Age at death - 25 - 28 years

Cist 113

Skull and dentition

- The facial skeleton had mostly broken up and the basal part was fragmented and deformed. The vault of the skull was rounded. Although the frontal bone was broken the remains of the supraorbital region showed that the Left frontal sinus was small. The mastoid processes were well formed. The coronal and sagittal sutures were fully fused and the lambdoid suture was fused internally.

The body and parts of the ascending ramus are present, in three fragments. A small part of the palate is also present with some much damaged portions of the alveolar process.

Two very heavily worn teeth are *in situ* in the mandible and six further teeth can tentatively be assigned to empty sockets. Only two sockets can be seen in the damaged maxilla and it seems probable that many of the maxillary teeth had been lost before death. A maxillary molar and premolar are present, both heavily worn, but neither belongs to the sockets in the maxilla. A further three tooth roots are present but they are so heavily worn that they are unidentifiable.

The very severe degree of attrition indicates an elderly individual, perhaps in the 50s or 60s and the dentition has been in a poor state. On the L side of the mandible, the first and second molars have been lost during life, with excellent healing of the socket areas. The L third molar is reduced to a mere stump, the whole crown having been worn away; there is a pinhole exposure of the pulp but no abscess is obvious. The second molar shows severe attrition, the crown having been worn completely away. There is a large pulp exposure in this tooth with a resultant abscess in the socket. The socket of the third molar shows a similar abscess in the socket. The socket of the third molar shows a similar abscess and this tooth (which had been lost *post mortem*) also must have had a large pulp exposure.

Vertebrae

- Only a part of cervical 2, most of lumbar 4 and 5 and also some other unidentifiable fragments.

Sacrum

- The first segment and a piece of the second segment showed full fusion.

Scapula

- Parts of a R.

Humerus

- The lower end of a R of fairly heavy build.

Radii

- Of the pair the L is broken but the R = 25.8 cm.

Ulnae

- The L of the pair is broken.

Carsi

- Pairs of capitates, scaphoids, trapezia, trapezoids, but only L hamate, L lunate, a pisiform and 2 others which were too damaged for certain identification.

Metacarpals

- Fragments possibly representing some 8 or 9.

Phalanges

- Nine proximal, 4 intermediate and another fragment; a pair of thumb and 2 other terminal phalanges.

Innominate bones

- A pair broken.

Femora

- A pair, heavy build with very prominent linea aspera; necks anteverted. R = L = 45.9cm.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Patella - A R.
- Tibiae - A pair, damaged.
- Fibulae - Pieces of shafts.
- Tarsus - A L talus and part of a calcaneum (?L) and also a piece of bone that may be part of a cuneiform.
- Height - 171.8 cm - 174.2 cm (evidence of femora); 174.6 cm - 177.9 cm (evidence from R radius)
- Sex - Male, heavily built
- Age at death - Over 40 (anatomical evidence), 50s-60s (dental evidence).

Cist 114

- Skull and dentition - The skull was crushed from above and in front with most bones breaking up into fairly small pieces. The fragments of calvarium were supported in position by the mixture of hard packed pebbly soil and some small bone fragments which filled the cranial cavity. The skull base, too, was broken up but the pieces of petrous temporal and occipital bones were more or less in position relative to one another. Sutures were fused internally except for the squamo-parietals. The calvarium was of moderate thickness. The R supraorbital ridge is moderately prominent but does not seem to contain much of a frontal sinus. The mastoid processes are fairly well developed. Much of the facial skeleton was missing.

The mandible and the alveolar process of the maxilla are almost complete. Twenty nine permanent teeth are present. All the permanent teeth have erupted into functional positions and there is heavy attrition.

There is no evidence of dental caries or of periodontal disease, and indeed the dentition appears unusually healthy, with remarkably little horizontal loss of alveolar bone when the degree of attrition is taken into consideration.

- Vertebrae: Cervical - One and 2 and one other.
- Thoracic - All 12, more or less damaged.
- Lumbar - All 5, more or less damaged.
- Sacrum - Various pieces. The bodies of S1 and 2 were not fused.
- Ribs - Much broken but elements of 10 from each side were recognisable.
- Clavicles - A pair, in pieces.
- Scapulae - A pair, in pieces.
- Humeri - A pair of strong bones showing appearance of angulation (about 20° R and 10° L) at the prominent deltoid tuberosities. The head of the L is missing. The R (in 2 pieces) = 29.9 cm. One medial epicondyle looks as if it had not been long fused; possibly this may be the result of a healed fracture.
- Radii - A pair, broken - the lower end of the R and the upper end of the L are missing.
- Ulnae - A pair, broken.
- Carpus - The hamate, capitate, and trapezium of R side.
- Metacarpals - R 1st and 3rd and pieces of other 5 to 7.
- Phalanges - Six proximal, 4 intermediate and 2 distal.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Innominate bones - Pieces of a pair - much broken.
- Femora - A pair, broken. R -- 40.7 cm approximately.
- Patellae - A pair.
- Tibiae - A pair, broken. Squatting facets present. R = 34cm.
- Fibulae - A pair, broken.
- Tarsi - Pairs of calcanei, tali, and medial cuneiforms and the navicular, cuboid and lateral cuneiform of the L side.
- Metatarsals - The L 1st, 2nd, 4th and 5th and the head of another.
- Phalanges - Five proximal, one intermediate and the distal phalanx for a big toe.
- Sesamoids - Three.
- Height - 160 cm - 167, cm
- Sex - Male, possibly
- Age at death - 30 -35 years (dental evidence), 30-40 years (anatomical estimate)

Cist 115

- Skull and dentition - The skull is badly crushed down onto the base which is also fragmented. One R maxillary molar is present. Part of the body of an extremely fragile mandible is present, with three mandibular molars *in situ*. The mandibular third molar was unerupted at the time of death and the apex of the root is incompletely formed. The tooth was probably about to erupt. The root apices of the second molar are fully formed and these facts suggest an age of 16- 18 years.
There is no evidence of dental caries and the molars are well formed and calcified.

- Vertebrae - Only a few fragments, mainly of the neural arches.
- Scapula - The spine of a L.
- Humerus - The shaft and part of the lower end of a L - the medial epicondyle was not fused - age therefore under 18 years.
- Ulna - Part of the upper end of a L.
- Innominate bones - Ischial and adjacent hip joint fragments.
- Femur - The upper and lower ends of a L - the state of epiphyseal fusions suggest age of a little under 18 years.
- Tibia - The shaft of a L, damaged - lacking the lower end and most of the upper end. A small piece of the upper metaphysis showing non fusion with the epiphyses again points to an age of 17-18 years.

- Age at death - unidentifiable fragments
17 to 18 years (anatomical evidence)

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Humeri - Both are broken. The epiphyses of the upper ends and the medial epicondyles are incompletely fused.
- Radius - A L, complete but broken - the upper epiphysis is fused and the lower epiphysis is not completely fused.
- Ulnae - Both are represented, the L is broken but complete; its lower epiphysis is incompletely fused; its olecranon epiphysis is absent; the R is represented by part of the upper end and a piece of shaft.
- Carpals - trapezium, trapezoid, capitate, hamate, lunate and triquetral of the R side and both scaphoids.
- Metacarpals - R 1st, 3rd, 4th and 5th and the shaft of another.
- Phalanges - Three and a half pairs of proximal, 5 intermediate and 4 distal.
- Sacrum - Broken but consists of parts of the upper 3 segments.
- Innominate bones - Both are represented. The acetabula are fully fused but the posterior part of L Iliac crest epiphysis was separate and unfused.
- Patellae - Fragments.
- Femora - Both are present, the lower end of the R is damaged and the lower end of the L is broken from the shaft. All epiphyses seem fused, though the lower epiphyseal lines are still detectable. The lengths are about 41cm.
- Tibiae - Both are damaged, but both upper and lower epiphyses are fused.
- Fibulae - Probably both are represented by a number of pieces.
- Tarsals - Fragments of a calcaneus and perhaps of a talus, also a L navicular and part of a R; L medial and intermediate cuneiforms and some other fragments may include a piece of a cuboid.
- Metatarsals - A L 1st, bits of apparently L 3rd and 4th and the base of L 5th.
- Phalanges - Pieces of 4 proximal phalanges.
- Pathology - Probably died from a blow to the R parietal area.
- Height - 156 cm- 157 cm
- Sex - Female
- Age at death - 15-18 years, on dental evidence; 21-23 years on anatomical evidence

Cist 119

- Skull and dentition - The bony tissues had almost completely disintegrated. The cementum and dentine of the teeth had disappeared, only the shells of enamel covering the crowns remains. 31 permanent teeth can be recognised and all have been in function. The degree of attrition of the molars is greater than that of the premolars which are much less heavily worn. The teeth are all very small. On the whole they are well formed and calcified, but there is slight hypoplasia on the lower canine crowns at a level which may indicate some minor metabolic upset at about four years. There is no evidence of dental caries. Only thin bone fragments and a bony powder survived.
- Age at death - 25-30 years, (dental evidence).

Cist 117

Skull and dentition

- The skull was damaged and lacked some of the facial skeleton. The calvarium was apparently small and rounded; the supraorbital ridges are not marked and the contained frontal sinuses are small. The mastoid processes are small. All sutures are unfused and there is a small metopic suture immediately above the naso-frontal suture. The nasal bones project forward rather than downwards. The cheek bones were probably prominent.

There is a large indentation in the R parietal area with fragments of the R parietal bone driven into the cavity. One cannot say definitely whether this occurred before or after death but there is also a line of fracture extending from the base of the styloid process of the R temporal bone across the occipital bone, bisecting the R occipital condyle and passing laterally to just behind the groove for the L occipital artery. This certainly looks like an *ante mortem* basal fracture of the skull and so this and the R parietal damage are probably indicative of a violent death.

The alveolar process of the maxilla and the bony palate have survived in good condition though the upper part of the face has been lost. The L body and the ramus of the mandible are also almost complete and virtually undamaged, but the R ramus is missing and the R body shows quite severe *post mortem* erosion of bone. The mandible is small and lightly built.

Twenty eight permanent teeth are present in functional positions. Both maxillary third molars and the mandibular L third molar are congenitally missing (ie have failed to develop) and X-rays confirm their absence. The mandibular R third molar is present but unerupted. An x-ray shows that the root of this tooth is only partially formed. As the roots of the second molars are completely formed, the individual is likely to have been over 15 and the most probable age at death is c 16-18 years.

The teeth are well formed and well calcified; there is no evidence of dental caries or of periodontal disease.

- Vertebrae: Cervical
- Thoracic
- Lumbar

- 1, 2 and fragments of 3 or 4 others.
- All 12 are represented, mainly by posterior portions (spines, neural arches and transverse processes). The bodies are almost entirely absent from cervical 3 to thoracic 9.
- All 5 are represented - the anterior parts of the bodies of vertebrae Thoracic 10 to Lumbar 5 are badly eroded.

The apical epiphyses of the spinous processes appear to be missing and unfused.

Ribs

- Elements of 11 L and 12 R are recognisable together with several other fragments. The epiphyses of the heads are unfused and missing.

Scapulae

- Both are represented by broken pieces.

Clavicle

- A piece of each is present.

Cist 120

- Skull and Dentition -
- Vertebrae - One piece.
- Ribs - Five fragments.
- Scapula - L Glenoid region, fragment
- Humerus - Four pieces of a L.
- Hand - A piece of a Carpal Scaphoid and a piece of a Carpal Phalanx.
- Tibia - Pieces of a R shaft.
- Fibula - A piece of a shaft.
- Long bone fragments, suggestive of a heavily built individual
- Rib fragments suggest a younger individual
- Age at death - 22 years and a younger individual

Cist 121

- Skull and dentition - The skull is thin, fragile, distorted and broken up. Both temporal bones have lost the mastoid processes but these do not seem to have been large. The frontal bone is completely absent. In the base the sphenio-occipital synostosis is complete. Nothing remains of the maxillae and upper facial skeleton. The body of the mandible is well-preserved, though the ascending rami have been broken off. Thirteen permanent mandibular teeth are *in situ*, and there are seven loose teeth. Both mandibular third molars have been lost *post mortem*; the sockets look as if the roots had not been fully formed. One maxillary third molar appears to be fully formed but the other has an open apex. And there is slight wear on the other permanent teeth. No evidence of hypoplasia, of dental caries or of periodontal disease. There may have been an area of bone infection behind the mandibular R third molar, and this suggests a periocoronitis associated with a partially erupted third molar. There have been heavy deposits of calculus on the lingual sides of the mandibular teeth.
- Vertebrae - 4 lumbar vertebrae represented by the neural arch and spine and articular facets and part of the R side of the bodies.
- Ribs - Pieces present are from 3 R and 4 L ribs.
- Sacrum - Badly broken; the bodies of segments 1-4 are present and seem to be fused together.
- Clavicles - The lateral ends of a pair.
- Scapulae - A pair, represented by their spines, glenoid processes, axillary borders and parts of the blade.
- Humeri - A pair, slightly damaged. Slender, the L more so than the R and also shorter (L = 30.5cm, R = 31.4cm). Muscle markings are not prominent and all epiphyses (except the L medial condylar) seem to be fused.
- Radii - The lower 1/4 of R, most of the L but damaged.
- Ulnae - The upper end of a L and the mid shaft of a R.
- Hands - A fragment of a carpal (trapezium, possible), one 1st metacarpal and fragments of 3 others, 4 pairs of proximal phalanges, 7 intermediate phalanges and 6 distal.

- Innominate bones - A pair, lacking the pubic and ischial rami. The distal epiphyses seem to have fused recently.
- Femora - A pair, slender build, damaged; all epiphyses are fully fused. Approximate length is 43.6cm.
- Patella - Most of a L.
- Tibiae - A pair, damaged and broken. Both sets of epiphyses are fused.
- Fibulae - A pair, damaged.
- Feet - Fragments of a L calcaneus, talus and navicular, a R cuboid, a pair of medial cuneiforms, a R intermediate cuneiform and a fragment of another, both 1st, R 3rd, 4th and 5th metatarsals.
- Height - Female 161 cm- 165 cm or Male 164 cm - 169 cm
- Sex - Female, probably, but might be male
- Age at death - 19-22 years, based on dental evidence; 23 years, perhaps older on anatomical evidence.

NB There were also numerous unidentified fragments - one of these may have been burnt - and a piece of the shaft of a Radius of pig or sheep.

Cist 122

- Skull and dentition - The skull was broad and rounded - almost globular - with a high forehead. The calvarial elements were thin. the supra-orbital ridges were slightly prominent medially; the mastoid processes were small. Sutures were separating. Some teeth were found in the faucial region soil and the upper 2 cervical vertebrae were found embedded in the soil below the skull. The maxilla and mandible are reasonably well-preserved; 28 erupted teeth *in situ*. Three teeth lost *post mortem*; maxillary L third molar appears to be congenitally absent. The remaining three molars have erupted into function and roots are complete. Degree of attrition slight. No evidence of dental caries or of periodontal disease. On the whole the teeth appear to be well formed and well calcified, though there is a slight hypoplasia line halfway down the crowns of the canines and first premolars, which may indicate some minor upset in metabolism about the age of 5 years. However, the second premolars and second molars, which should have been developing at the same time, do not show this line.

- Vertebrae: Cervical - 1st and 2nd were found below the skull. 3rd to 7th were also found.
- Thoracic - All 12 present.
- Lumbar - Pieces of 4 only. The bodies from cervical 3 to thoracic 12 were badly eroded - those from thoracic 3 to thoracic 9 less so than the others.
- Sacrum - Part of the first segment - fusion of the centra of S1 and S2 had not occurred; another piece.
- Ribs - Various R fragments and some L.
- Scapulae - R Glenoid, spine and part of axillary border - L spine, inferior angle and some fragments.
- Clavicles - R shaft with most of lateral end - L represented by 2 fragments.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Humeri - R with some damage to the head and lateral part of lower end
L in 5 or 6 fragments.
- Radii - Pair - both ends of each are missing.
- Ulnae - Pair - lower third of each is missing.
- Hands - One trapezoid, R 2nd metacarpal and bits of 2 other metacarpals and of 2 phalanges
- Innominate bones - R represented by the ilium and a piece of the pubis.
L represented by the auricular surface of the ilium.
Six other pieces which could belong to either side.
- Femora - R in 3 pieces - proximal end damaged (= 40cm approximately)
L shaft and lower end only.
- Patellae - Pair.
- Tibiae - Pair, both damaged. R = 32.3cm approximately. L has slight squatting facet at lower end.
- Fibulae - Pieces of a pair.
- Feet - Calcanei (pair), L talus, part of a R(possible) cuboid, navicular
R. L medial cuneiform, Lateral cuneiforms (pair), 1st metatarsals (pair) and fragments of another 3 or 4, a phalanx and a sesamoid.
- Height - 154 cm- 156 cm
- Sex - Female
- Age at death - 20-25 years (dental estimate). 20, perhaps more (anatomical estimate)
- NB Non-human bone - Piece of a bovine humerus.
- Cist 123
- Skull and dentition - The skull is fragile; the base is broken- it was badly crushed from side to side but seemed to have been rather elongated. The supraorbital ridges are fairly prominent and the mastoid processes are large. The calvarial pieces are thick (mainly due to a finely granular diploe. Sutures are obliterated internally and almost so externally. The maxilla is incomplete, and only part of the R body of the mandible is present. 23 permanent teeth are present, in varying stages of disintegration. Most of the teeth are heavily worn. No evidence of dental caries. The amount of *post mortem* bone destruction makes assessment of the periodontal condition difficult but it seems likely that periodontal pockets were forming in association with some of the molars. The teeth were well formed and were originally rather large.
- Vertebra - The L posterior part of a cervical vertebra (pedicle, neural arch and articular processes suggests arthritis of spine).
- Ribs - Only fragments - some of these are indicative of heavy build.
- Scapula - The glenoid region of a R.
- Humeri - The lower end of shaft of a L is of heavy build, also a part of the head and upper end of the shaft of another humerus.
- Radii - The head of one and the middle thirds of shafts of a pair.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Ulnae - R upper end and middle third of shaft, L middle part of shaft and part of upper end, also part of the head (lower end) of an ulna.
- Innominate bone - Part of R ilium with the acetabular surface and 2 other fragments.
 - Shafts of unidentifiable long bones.
- Sex - Male
- Age at death - 45-50 years (dental estimate), Adult (anatomical evidence)

Cist 125

Skull and dentition

- This skull is fragile - the facial skeleton is largely missing as is much of the base including the occipital condyles. It is very broad - biparietal diameter is 14.5cm, maximum length of 18.5cm approximately. The frontal bone is fairly thick near the mid line; the parietal and occipital bones are thin. Sutures are not fused - much of the coronal is damaged but the sagittal and lambdoid can be seen to be NOT fused. The supraorbital ridge is not prominent, the frontal sinuses are small and the L mastoid process is small (the R is eroded).
Only the anterior part of the body of the mandible is present, with sockets for the incisors and canines. No teeth were *in situ* in the fragment of mandible, but 16 permanent teeth are present and one of these can be fitted into the appropriate mandibular socket.
The mandibular molars are quite heavily worn, well formed and calcified; no evidence of dental caries and periodontal disease cannot be assessed.

Vertebrae

Humeri

Radii

Ulnae

Hand

Innominate bone

Femora

Tibiae

Feet

Sex

Age at death

- Only 3 fragments.
- Pair, much broken - fusion of upper epiphyses seems complete.
- Lower ends of a pair and a piece of a shaft.
- Most of a R (broken).
- Only one proximal carpal phalanx remains.
- A piece of ischium.
- Parts of the shafts of a pair and a piece of a head.
- Middle third of the shafts of a pair.
- Pieces of a talus and a calcaneus.
- Female
- 30-35 years (dental and anatomical evidence).

Cist 126

Skull and dentition

- The skull was cracked in many places and was eroded. The L. zygoma had separated from the skull which had been distorted by pressure from side to side resulting in some separation at the sutures (unfused). The supraorbital ridges are not prominent and the mastoid processes are small. Damage to the mandible (L. coronoid and condyloid processes were missing) and to the basi-occipital bone.

The greater part of the jaw survived in good condition; 25 erupted permanent teeth are still *in situ*. Only 3 teeth have been lost *post mortem*, but all four third molars are congenitally absent. The mandible is small and delicately built, the palate is small and fairly deep. The teeth are small, particularly the premolars. Although the jaws are small there has been too much room for these tiny teeth and there is spacing of the canines and premolars in all four quadrants, with slight tilting of some teeth.

Wear relatively small.

There is no evidence of dental caries. Slight horizontal resorption of alveolar bone has occurred but there is no evidence of frank periodontal disease. A retained deciduous root is present between the mandibular R premolars, left behind during the shedding of one of the deciduous molars.

Hyoid bone

- The body and a greater cornu were found along with cervical vertebrae 1st to 5th between the mandible and the base of the skull embedded in soil.

Vertebrae

- All vertebrae were represented - their bodies were badly eroded anteriorly. The R 12th Rib and the posterior ends of R Ribs 3, 4, and 5 were found in articulation with their Vertebrae.

Sacrum

- Parts of the upper two segments

Ribs

- Small fragments.

Clavicles

- The medial end of a ?R and most of an apparently younger and slenderer L - NOT a pair.

Scapulae

- Pair - lacking much of the thinner parts.

Humeri

- Pair - rather slender - R intact; 30.5cm the L is broken and lacks both ends. The R medial epicondyle had apparently not fused.

Radii

- Pair - R lacking the head and L lacking upper and lower ends.

Ulnae

- Pair - much broken and eroded.

Carpals

- hamate, scaphoid, capitate and lunate from the R side and a triquetral (?).

Metacarpals

- R 3rd, 4th and 5th and parts of 3 others.

Phalanges

- Proximal - one intact and bits of 2 more. Intermediate - 6. Distal - 3.

Innominate bones

- Both are represented but damaged. The Iliac crests (secondary or epiphyseal portions) are absent.

Femora

- Pair - proximal two-thirds only. The proximal epiphyses have fused. The lower ends are missing but appear to have become broken off after excavation.

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- Tibiae - The shafts of a pair - upper and lower ends are missing.
- Fibula - Parts of a shaft.
- Feet - Parts of a R talus and calcaneus, both phalanges for a big toe and 2 more proximal phalanges were all that were found.
- Height - 161 cm- 162 cm
- Sex - Female
- Age at death - 20-25 (dental estimate); 18 -20 years (anatomical estimate)
- Second individual, possible - A piece of flat bone (approximately 4.5 cm by 3 cm) - apparently a very young child's ilium (L) was found lying embedded in the soil against the necks of R ribs 3, 4 and 5. parts of the upper 2 segments. Also three other small pieces of bone, one the ischium belonging to the ilium.

Cist 127

- Skull and dentition - This much broken up and its elements separated. Little remains of the basal parts - the L Temporal bone is present but its mastoid process is abraded, and the tempora- mandibular joint surface is all that remains of the R one. The L zygoma has an unusually thick notched inferior border which suggests prominent high cheeks.
Fragments of both sides of the maxilla and mandible are present, carrying 14 erupted teeth. The posterior parts of the R quadrant have been destroyed, but sufficient remains of both quadrants on the left to suggest that the mandibular L third molar was congenitally absent and the maxillary L third molar may have over-erupted as a result.
There appears to be a very small early carious lesion of the maxillary L third molar. Hollows in the occlusal surfaces of the mandibular first and second molars suggest that carious lesions had commenced here, but with continuin attrition of the toothe the caries stopped and the affected area became hard again: this is known as arrested caries. There is moderate general horizontal bone loss and eidence of periodontal disease in the L maxillary molar region.

- Vertebrae - Only the bodies of 3 lumbar vertebrae.
- Sacrum - Part of the S 1st segment - the joint with the 2nd segment centrum had not fully fused.
- Scapula - The glenoid portion of a L.
- Carpal - A damaged lunate bone was all that was present from the upper limbs).
- Innominate bones - Pieces of both ilia with parts of the hip joint surfaces - the L auricular surface is small.
- Femora - Part of a head and neck.
- Long bone fragments - Unidentifiable
- Sex - Female, possibly
- Age at death - 25-30 years (dental evidence); 25-28 years (anatomical estimate)

Cist 128

Skull and dentition

- The upper facial skeleton and anterior part of the skull vault are missing. The remaining part of the calvarium is thin and rather rounded. of the base the 2 petrous temporals, much of the sphenoid and the basal part of the occipital bone are present. the sutures of the calvarium are not fused. The mastoid processes are not large.

The greater part of the body of the mandible is present, but of the maxilla only a small portion of the palate has survived. Altogether 13 permanent teeth are present.

The mandibular R third molar has erupted into function and its roots are complete. However the crown of this tooth is hardly worn at all and the other molars show relatively slight attrition, so that the individual was probably a young adult.

There is only a slight degree of horizontal bone resorption in general, though incipient periodontal disease can be detected in the region of the mandibular R second molar which has erupted in a slightly abnormal position, partially trapped below the first molar.

Two teeth, the maxillary R first molar and the mandibular L first molar, display large carious cavities, the lesions in both instances being situated on the distal side side of the tooth, having started at the neck of the tooth; the resultant infection of the pulp has in turn caused an apical abscess to form on the palatal root. The abscess on the first molar root communicates with a large shallow abscess cavity distal to the first molar, in the position where the second molar socket should be; it seems possible that the second molar may have been lost *in vivo*. The lesion of the lower molar cannot be inspected directly because of the presence of the tooth behind, but x-rays show that here also the base of the cavity has reached the pulp and small abscesses are beginning to form on both roots.

The mandibular L second premolar is congenitally absent: from the width of the space one can deduce that the second deciduous molar was retained for some time but was eventually shed, long enough before death for any remaining trace of a socket to have disappeared.

Vertebrae

- Cervical 1, 2 and 3rd and Lumbar 3, 4 and 5 and some fragments were all that were identified. All were damaged.

Sacrum

- Only the upper 2 segments are present. Though badly damaged they appeared to show a congenital abnormality namely deficiency of the neural arch elements.

Hyoid bone

- A piece of the body.

Ribs

- Only a few fragments.

Scapula

- Only a piece of the root of the spine of a L.

Humerus

- Fragments of heads and the lower two-thirds of a R.

Forearm bones

- Fragments of radius and ulna.

Hands

- Only one proximal carpal phalanx.

Innominate bones

- Both are represented though badly damaged.

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- Femora - A pair - both somewhat damaged - R; 41.0cm. All epiphyses are fused. Though the shafts are slender the linea aspera are well developed.
- Tibiae - A pair - lacking lower ends.
- Fibulae - A pair - lacking lower ends and broken.
- Feet - Parts of the L talus and calcaneus and pieces of 2 metatarsals alone are present.
- Height - 156 cm - 158 cm
- Sex - Female
- Age at death - 20s

Cist 129

- Skull and dentition - No skull elements were present.
The jaw bones have suffered severely from *post mortem* destruction. The palatal area and part of the alveolus of the maxilla are present; only a tiny fragment of the body of the mandible has survived. Parts of 17 erupted permanent teeth are present: they have suffered particularly badly from *post mortem* chipping and flaking of the enamel.
The third molars have erupted and their roots are complete, but the amount of wear of all the teeth is relatively slight.
There is no evidence of dental caries or of periodontal disease. The teeth seem to have been well formed and well calcified.
- Vertebrae - Parts of first 2 cervical vertebrae
- Femora, shaft - fragment
- Fragments - Unidentified
- Age at death - 20-25 years (dental estimate).

Cist 130

- Skull and dentition - Several fragments of calvarium.
No parts of the jaw and only some fragments of teeth survived. One tooth crown is recognisable as a fairly heavily worn mandibular R third molar. There are parts of another mandibular molar and of a maxillary molar but neither can be exactly identified. A further 7 small fragments of tooth enamel are probably from molars or pre-molars. The age estimate is based on the degree of attrition of the recognisable third molar.

- Innominate - Fragment and piece of joint
- Femora - Part of a head
- Tibia - Two fragments
- Age at death - 30s or 40s (dental evidence).

Cist 136

- Skull and dentition - None found
- Fragments only -
- Humerus - Part of shaft, probably a R.

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Cist 137

- Skull and dentition - No part of the jawbone has survived. The teeth are represented only by fragments of enamel, too small to identify.
- Fragments - Unidentifiable

Cist 139

- Skull and dentition - None
- Fragments - Unidentifiable

Cist 141

- Skull and dentition - No skull fragments were present.
A small fragment of the L body of the mandible is present, with a second premolar, first permanent molar and second permanent molar in function, the third molar still developing within its bony crypt. The roots of the second permanent molars are completely formed, the degree of development of the third molars suggests age.
The teeth are well formed and well calcified; no evidence of dental caries.
- Fragments of long bone - Unidentifiable
- Other fragments - Unidentifiable
- Age at death - 14-16 years

Cist 143

- Skull and dentition - No skull has survived.
No fragments of jaw bone have survived. Parts of 11 recognisable tooth crowns are present and a few enamel fragments.
The best preserved tooth is the maxillary L third molar. The root has at least started to form, but the crown is completely unworn; it seems probable that the tooth has not erupted. The remaining teeth also show little attrition.
- Ribs - Most of R 1st and 2nd and a piece of another.
- Vertebrae - Two pieces.
- Radius -
- Innominate bone - The pubis of a smallish ?adult.
- Tibia - The lower half of a L, over the age of 18 years.
- Fibula - A piece of shaft.
- Talus - Part of a R.
- Long bone shafts - Unidentifiable fragments
- Age at death - Adolescent-15-20 (dental and anatomical evidence)

143/2

- Skull and dentition - petrous temporal, 2 thin pieces, possibly of calvarium
- Innominate - ilium
- Age at death - young child
- NB - These bones were among those of the Burial 143, but were not recognised as another burial in the cist

Cist 145

Skull and dentition

- The skull is broad, rounded, with unfused sutures, small mastoid processes, and although the frontal bone as a whole is prominent, the supra-orbital ridges are not prominent. The calvarium is of moderate thickness.

The mandible and the maxillary bones are almost intact. There is a full complement of 32 teeth, all erupted into functional positions and perfectly spaced in well-formed arches. X-rays show that the apices of the third molars are completely formed. There is very little wear of the teeth however.

There is no evidence of dental caries or of periodontal disease, except in the third molar regions where the second and third molars are placed rather close together and there may have been some loss of the interdental septum of bone. The enamel appears well-formed and well calcified and there is no sign of hypoplasia.

- The first 3 cervical bones are missing - the rest of the spinal column bones are all present and more or less complete - epiphyseal rings are present.

Vertebrae

Ribs

- All are represented though mostly broken.

Sternum

- The manubrium and part of the body are present.

Clavicles

- A pair, of slight build.

Scapulae

- A pair - the blade portions have been very thin.

Humeri

- A pair. R = L = 32.0cm.

Radii

- A pair. R = 23.2cm, L is broken.

Ulnae

- A pair - L is broken.

Carpals

- Pairs of scaphoids, capitates, hamates, lunates, pisiforms, a L trapezium, a trapezoid and one broken other carpal which may be a R trapezoid.

Metacarpals

- Pairs of nos 1-4 and a L 5th.

Phalanges

- Five pairs of proximal, 3 and a half pairs of intermediate, and distal phalanges for one thumb and 5 other digits.

(Carpal)

Sacrum

- This is unusual in that it consists of only 4 segments. It is female in form. Fusion of the centra to one another and of the R alar portions also, is incomplete.

Coccyx

- The first segment is present - the second is missing.

Innominate bones

- Both are complete, of slight build and, as the iliac crest epiphyses are incompletely fused, the age is probably around 25 years.

Femora

- A pair of slender bones. R = 43.6cm L = 43.5cm.

Tibiae

- A pair, slender, with squatting facets at lower ends. R = 35.0cm, L = 34.5cm.

Fibulae

- A pair.

Patellae

- A pair.

Tarsals

- Present are pair of talus and calcaneus, L navicular, intermediate and lateral cuneiforms.

Metatarsals

- A R 1st and L 2nd and 3rd.

Phalanges

- The proximal and distal phalanges for one big toe and 4 other proximal phalanges.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

Height - 160-164 (from leg bones) 163-167 cm (from arm bones)cm , slender build

Sex - Female

Age at death - 20-25 years (dental estimate); 25 years (anatomical estimate)

Cist 146

Skull and dentition - L petrous temporal
No portion of the jaw bones survived. Two teeth are present, an erupted but only slightly worn maxillary second deciduous molar and a developing maxillary first premolar, both from the R side.

There is no evidence of enamel hypoplasia or of dental caries.

Other - Fragments, unidentifiable

Age at death - 5-6 years (dental estimate)

Cist 147

Fragment - unidentifiable

NB Sheep tooth

Cist 148

Skull and dentition

- This is almost intact - only one lower central incisor is missing despite a post-mortem fracture of the mandible at the mid line. The calvarium is smoothly rounded, sutures are closed (almost obliterated) externally. The supra-orbital ridges are moderately developed medial to the supra-orbital notch (l side) and the supra-orbital foramen (R side). There would seem to be moderately large frontal sinuses. An unusual feature is the presence of small pits on the external surface of the calvarium and of furrows or grooves which almost certainly accommodated blood vessels under the periosteum; one of those extends from l. greater wing of the sphenoid backwards over the vertex and the forwards to the R pterion above which is an area of pitting; another groove extends upwards from the R supra-orbital foramen for one inch, and a third extends upwards and backwards from the margin of the foramen magnum. Both zygomatic arches and the L neck of mandible are broken. **Illustrations A8a and b.**

The maxilla is complete and the mandible, though fractured near the midline, is also complete except for the l. coronoid process and condyle which show some *post mortem* erosion, leading to loss of the neck of the condyle and part of the condylar head. Thirty one permanent teeth are *in situ*, the only tooth lost *post mortem* being the R central incisor, which was in the fracture line of the mandible.

The degree of attrition is quite severe, particularly in the molar regions and wear is more marked on the L than on the R side.

Several pathological conditions are present. Large carious cavities are present in the maxillary L second and third molars. The third molar is also slightly impacted against the second molar and has not erupted fully, though it shows some degree of wear. It appears that similar carious lesions have been present in the maxillary R second and third molars, but part of the crown of the third molar has broken away, rendering the carious area self-cleansing. This has stopped the carious progress of both carious lesions in the molars on this side, resulting in 'arrested caries'. There is general slight to moderate horizontal resorption of alveolar bone, more noticeable in the molar regions. In the case of the mandibular molars there is relatively slight evidence of periodontal disease, but the latter is much more marked in the maxillary molar area, with pockets forming between the second and third molars on both sides. There is a small torus mandibularis on each side of the mandible, on the lingual aspect in the region of the canines and premolars. The teeth are quite large, well formed and well calcified.

Vertebrae

- A full set of vertebrae are represented - the bodies are eroded in varying degree for cervical 7 and thoracic 1, thoracic 5-12 and lumbar 2-4 and the bodies are missing for thoracic 2-5 and lumbar 1.

- Sacrum - Only the upper 2 segments and some separate fragments of the lower segments.
- Ribs - A number of large pieces from both sides and many smaller pieces.
- Scapulae - Three pieces of R, and the spine of the L.
- Clavicles - A pair. The R has possibly had an old fracture at its outer end. There is also a cut made by a thin bladed implement.
- Humeri - A pair, moderately slender, with complete fusion of all epiphyses; L is broken, R = 29.8cm.
- Radii - A pair, both damaged.
- Ulnae - A pair, both damaged with loss of the lower ends.
- Carpals - R lunate, a damaged trapezium, a pisiform and pairs of scaphoids, trapezoids, and triquetrals.
- Metacarpals - Pieces of 5.
- Phalanges - Five proximal and 2 intermediate phalanges.
- Innominate bones - R is almost intact, L is damaged. Sex is probably female.
- Femora - A pair; all epiphyses are fused. The R head and neck are more anteverted than the L. R = L = 41.3cm.
- Patellae - A pair.
- Tibiae - A pair. The L is damaged and shows a slight squatting facet at lower end. R = 32.6cm.
- Fibulae - A pair, both are broken - the L is complete in 2 pieces.
- Tarsals - A pair of calcanei, L talus, R navicular, R lateral cuneiform, L medial cuneiform.
- Metatarsals - L 5th and R 4th part of base of R 1st and the shaft of another.
- Height - 155 - 159.5 cm
- Sex - Female
- Age at death - 35-40 (dental estimate); nearer 40 than 30 (anatomical estimate)

Cist 149

- Skull and dentition - Apart from one small fragment of bone, which may be from an alveolar process, and the crowns of 3 teeth there is nothing of the skull present.

No portions of the jaw have survived except for one small fragment which may be part of the alveolar process. The crowns of two fairly heavily worn molars are present, one maxillary and one mandibular, both from the L side. These may be either second or third molars, and the degree of attrition suggests a mature adult. Another fragment of a molar crown is too small to identify.

- Vertebrae - Despite considerable damage, elements of one Cervical, 7 or 8 thoracic and 5 lumbar vertebrae are recognisable.
- Ribs - Only a collection of fragments.
- Clavicles - The medial half of a L and the medial third of a R.
- Scapula - Part of one axillary border.
- Humeri - Lower halves of a pair.
- Radii - The proximal half of a R and the head and shaft fragments of a L.
- Ulnae - The proximal half of a R and the proximal articular part of a L.

- Carpals - Both scaphoids, R lunate and a trapezium (?R), also pieces of another carpal.
- Metacarpals - Fragments of 5.
- Phalanges - Two proximal, 5 intermediate and one thumb terminal phalanges.
- Innominate bones - Both are broken but recognisable - possibly female.
- Sacrum - Only a R articular process.
- Coccyx - The first segment with its cornua.
- Femora - Pair, broken. R-39.8 cm (approximately). -
- Tibiae - Both. Broken too much for measurement.
- Tarsals - Pairs of tali, calcanei (fragments) and cuboids (also damaged, a L navicular; also a L intermediate cuneiform and parts of both medial and of both lateral cuneiforms.
- Height - 153.6 - 155.3 cm
- Sex - Female
- Age at death - Mature adult

Cist 151

Skull and dentition

- This skull is incomplete but the small mastoid processes and very thin calvarial bone suggest a female. The sutures seem to be starting to close internally. It is notable for an area of discoloration with a raised rough fluted bony margin suggesting ossification into the dura at the margin of an extra-dural haematoma lateral to the apex of the Petrous-Temporal bone and associated with what appears to have been an irregular linear fracture extending further laterally.

Illustration A2.

The alveolar portions of maxilla and mandible are virtually complete, though other parts of both bones are missing.

26 erupted permanent teeth are present and one has been lost *post mortem*. The mandibular R second premolar is congenitally absent (confirmed by X-ray) and the heavily worn deciduous molar is still *in situ*. Its roots show virtually no evidence of resorption as yet. All four third permanent molars are still developing in their crypts. The stage of root development of these teeth suggests that the individual was probably aged 16-19 years. The relatively slight degree of attrition of the erupted permanent teeth supports this.

There is no evidence of dental caries or of periodontal disease. Slight hypoplasia lines on the crowns of the canines, premolars and second molars suggest some minor metabolic upsets between the ages of 5 and 6 years.

- Hyoid bone - The body and R greater cornu.
- Vertebrae Cervical - Two and 3, and pieces of C1 and 3 others.
- Thoracic - 1-12, more or less complete.
- Lumbar - Fusion of the epiphyseal rings was not nearly complete - the margins of the upper and lower surfaces of the centra showing the ridging that is characteristic of this stage of growth.
- Sacrum - Broken, the 1st and parts of the 2nd and 3rd segments show that fusion of the centra had not yet occurred.

Proudfoot: anatomical report [inventory] - Sheet 2/A2-E3

- Sternum - The manubrium and 2 small pieces.
- Clavicles - A pair, slender, and both are broken.
- Ribs - A number of broken pieces of slender ribs.
- Scapulae - The glenoid processes, spines and axillary borders of a pair.
- Humeri - A pair. R = 33.6cm, L = 32.6cm.
- Radii - A pair. R is broken, L = 23.5cm.
- Ulnae - A pair, the L is broken.
- Carpals - L scaphoid, both lunates, R trapezium, R capitate and R hamate.
- Metacarpals - All 5 pairs are represented - those for 1st and 5th digits are intact.
- Phalanges - Five proximal, 7 intermediate and one distal carpal phalanges are present.
- Innominate bones - A pair, broken; the Iliac cristal epiphyses are not fused. Probably female.
- Femora - A pair, broken, fusion of epiphyses had not long been completed. R = 44.4cm approximately.
- Patella - A R one.
- Tibiae - A pair showing squatting facets. R = L = 34.8cm.
- Fibulae - A pair, broken.
- Tarsals - Only the R intermediate cuneiform was missing - the L navicular was damaged.
- Metatarsals - The L 2nd and R 3rd alone are missing.
- Phalanx - The R proximal phalanx of the big toe
There is also the base of an unusual bone. It resembles a Metacarpal rather than a Metatarsal
- Height - 160-166 cm (lower limb bones); 164-172 cm (upper limb bones)
- Sex - Female
- Age at death - 18-20 years (anatomical estimate)
- Pathology - She appears to have lived for some time after a severe head injury.

Cist 154/F19

Skull and dentition

Femur

Tibia

Age at death

- Shaft without either ends, infant

- Shaft, without ends, infant

- Young infant