

Achavanich, Caithness

Human Remains

Mary Harman

Summary: The skeleton is that of a young woman of 18-22 years of age; she was about 5'5½" (1.67m) tall. There is no evidence of any injury or disease. She had good teeth, with no caries; her upper wisdom teeth had not developed, neither had one of the premolars on the left side, and she still had a milk tooth in that space.

Most of the skeleton was recovered: the following ~~xxx~~ are absent: most of the occipital, the mandible, the cervical and most of the thoracic vertebrae, most of the ribs, the left shoulder and arm, the left side of the pelvis, upper ends of the femora, and most of the hands and feet. Their absence is probably due to decay in the cist rather than the body being incomplete when buried. The following were destroyed by the C¹⁴ dating process:

The bones are brittle, and though some such as vertebrae, ribs and pelvis are badly broken, the long bones and most of the skull are well preserved. Assessment of age and sex are based on the criteria published by Ferembach et al. (1980, 517-549) and Miles (1962, 384). The pelvis is too incomplete to be useful in deciding the sex, and the mastoid processes and occipital are missing, but there are no brow ridges, and the first sacral vertebra has female characteristics; the small size and light physique of the vertebrae and limbs also suggest that these are the remains of a woman.

All the epiphyses are fused, though the first sacral vertebra is not completely joined to the rest: this shows that the person was a young adult and wear on the teeth suggests an age of between 18 and 22 years. The height, calculated from the length of the tibia using the formula of Trotter and Gleser (Brothwell 1981, 101) was 5'5½" (1.67m).

Though the mandible was missing, all of the lower teeth crowns except for the second incisors and the third molars are present; all of the teeth in the upper jaw are present except for the third molars, which almost certainly have failed to develop, rather than merely failing to erupt, and the ~~xxxxxxxxxxxx~~ left second premolar, which also has probably failed to develop: the deciduous molar has been retained.

Of the twenty six teeth found, none have caries; there are no abscesses in the upper jaw, and no evidence of periodontal disease: dental health was good. Slight traces of hypoplasia near the base of the upper first molar crowns suggest some slight disruption in diet or health when the tooth was developing, at an age of about two years. The retention of a milk tooth is unusual but does occur occasionally.

The cranium is very short and broad: there is no sign of distortion and the cranial index is: (hyperbrachycephalic).

run this on from (hypobrachycephalic).

This is extremely high, but is closely approached by the burial from Boarhills, Fife, where a cist contained the remains of a man with a cranial index of about 92 (Waterston 1926-7, 30-44); another cist in Strathnaver contained the burial of a man with a cranial index of 89 (Low 1932-3, 167-170), and a high proportion of short cist burials are brachycephalic.

Then the cattle scapula.

Additional refs.

Low, A 1932-3 in Edwards, A J H 'Short Cists in Roxburgh and Sutherland'
PSAS 67 164-70

Waterston, D 1926-7 'A Stone Cist and its contents found at Piekie Farm,
near Boarhills, Fife' PSAS 61 30-44

In the cist with the body there was a cattle scapula, from the left side of the body of a mature animal. The thin proximal border of the bone is missing, probably due to decay in the cist; there are no signs of wear or alteration on the bone except possibly a few ^{tiny} grooves on one edge.

Refs:

Brothwell, DR 1981 'Digging up Bones'

Ferembach, D, Schwidetzky, I and Stloukal, M 1980 'Recommendations for Age and Sex Diagnoses of Skeletons' Journal of Human Evolution 9 517-549

Miles, A.E.W 1962 'Assessment of the Ages of a Population of Anglo Saxons from their Dentitions' Proc Royal Soc. Medecine 55 pp 881-886

For Ref. only.

I A C Shepherd, A Shepherd, M F Bruce 'A Beaker burial at Mains of Balnagowan, Ardersier, Inverness' PSAS 114 1984 560-66
p 564 o markedly brachycephalic

Ailne, R et al. 'Short Cist at Mains of Daltulich, Bairnshire' PSAS 104
1971-2 283-5 (M F Bruce) o C.I. 78.6

J Close-Brooks 'Short Cists at Buckstone Road, Fairmilehead, Edinburgh
PSAS 105 1972-4 281-4 A Young p 283 two skulls, 'alrge and rounded'

LMR Wederburn 'A Short Cist Burial at Hatton Mill Farm, Fricockheim, Angus'
PSAS 102 1969-70 82-6 I H N Smart C.I. 80 p 85.

H Coutts 'Recent Discoveries of Short Cists in Angus and East Perthshire'
PSAS 97 1963-4 157-165 anatomist JDB MacDougall:
Newmonthill Cemetery Forfar cist 1 o brachycephalic p161-2
Pallaws Farm Monikie o C.I. 82.4 p 164

A S Henshall 'A Dagger Grave and other Cist Burials at Ashgrove, Methilhill,
Fife; PSAS 97 1963-4 166-179 T R Murphy Cist 1 brachycephalic p 177

S Piggott 'A Bronze Age Burial Cist at Balbie Farm Burntisland' PSAS 82
1947-8 299-301 W C Csman Hill o and o both markedly brachycephalic p 301

W Kirk and J Mackenzie 'Three Bronze Age Cist Burials in NE Scotland' PSAS
88 1954-6 1-14

Nether Craggie Dunnottar o C.I. 74.8 p 5
Bught Park Inverness o C.I. 80.0 p 8

J V S Megaw and D D A Simpson 'A Short Cist Burial in North Uist' PSAS 94
1960-61 62-78 I.W Cornwall o? C.I. 74.0 p 73

P J Ashmore 'A Cist at Ruchlaw Mains East Lothian' PSAS 112 1982 542-8
M Harman o C.I. 81.6 p545-6

V G Childe, A J H Edwards, F O MacDougall 'Newly discovered Short Cist
Burials with 'eakers' PSAS 78 1943-4 106-
Lochend, Inverness o C.I. 85.7 A. Low pp 107-9 (bones in wonderfully good cond.
West Denton near Drem East Lothian

R B K Stevenson 'Short Cists in the parish of Innerwick, East Lothian'
PSAS 74 1939-40 138-146
Thurston Mains o C.I. 81.5 141-2 A Low

A Low 'A Short Cist containing a beaker and other relics at Newlands, Cyne,
Aberdeenshire! PSAS 70 1935-6 326-331 o brachycephalic

J Ritchie 'A Short Cist found at Bridge Farm near Meikleour, Perthshire'
PSAS 69 1934-5 400-415
D R Dow o C.I. 82.6 p404-415

A Low 'A Short Cist containing a beaker at Kirkhill, Kiltarlity, Inverness-shire'
PSAS 68 1933-4 128-131 o C.I. 84.8

AJH Edwards 'Short Cists in Roxburgh and Sutherland' PSAS 67 1932-3 164 -170
A Low Strathnaver o C.I. 89.1 pp167-170

A Low 'Two Short Cists at Upper Boyndlie, Tyrie, Aberdeenshire' PSAS 67 1932-3
176-186 West Castle Hill o C.I. 80.4

J G Callander 'A Short Cist containing a Beaker at Newlands, Cyne, Aberdeenshire'
PSAS 67 1932-3 228- 231 A Low o C.I. 81.5

J H Craw 'On two Bronze Age Cists at Sprouston, Roxburghshire' PSAS 67 1932-3
308-311 A Low o C.I. 80.9 pp309-311

- J T Gordon 'A Third Short Cist at Rungally, Fife' PSAS 67 1932-3 354-361
D Waterston ♂ C.I.85 355-361
- A J H Edwards 'Short Cists in Angus and Nairnshire' PSAS 65 1930-31 418-426
A Low Carnach, Nairn ♂ C.I. 85.1 pp421-6
- J G Callander 'Two Short Cists at Kilspindie Golf course, Aberlady, East Lothian' PSAS 64 1929-30 191-199
A Low ♀? C.I.80.6 pp196-199
- J M Corrie 'A Short Cist at West Puldrite in the Parish of Evie and Rebdall' Orkney' PSAS 63 1928-9 190-195 A Low ♂ C.I. 72.3 ♂ C.I.77.5 193-5
- A Low 'A Short Cist at Culduthel, Inverness' PSAS 63 1928-9 217-224
♀ C.I. 78.7
- H Marwick 'Some Cist-Burials in Orkney' PSAS 63 1928-9 377-383
A Low ♂ C.I. 72.3 381-3 Groundwater Hill, Orphir
- D Waterston 'A Stone Cist and its contents found at Piekie Farm, near Boarhills, Fife' PSAS 61 1926-7 30-44 ♂ C.I. c.92
- R W Reid and J R Fraser 'Short Stone Cist found in the Parish of Kinneff and Catterline, Kincardineshire' PSAS 58 1923-4 27-40 ♂ C.I. 85
- JG Callander 'A Short Cist containing a Food-Vessel and Human Remains at Bridgeness West Lothian' PSAS 58 1923-4 286-294
Bryce T H ♂ ? C.I. 76 pp291-294

Measurements L tib 362
ulan 265

length skull c. ~~168~~ 169.
width 158

long bones & skull well preserved.

Everything fused except sacrum - 1st body not fused.

Age - probably c. 18-22.

+ L cattle scapula - missing glenoid border proximal border - no signs wear or alteration except poss. a few grooves on one edge.

skull size

Children's
Achavanich
LOCALITY

PERIOD <i>Beakes</i>	NUMBER	MUSEUM	SEX ♀	AGE 18-22
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ASSOC FINDS <i>Beakes, w cast. L scapula of vertebra</i>	REFS	CONDITIONS OF BONE <i>Quite Good - bitile but well preserved</i>
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<i>N</i> 7 6 5 4 3 2 1 1 2 3 4 ^e 6 7 <i>N</i>	e d c b a a b c d e
8 7 6 5 4 3 2 1 1 2 3 4 5 6 7 8	e d c b a a b c d e

- X = Loss A M
- = Loss P M
- NP = Not Developed
- C = Caries
- A = Abscess
- E = Pulp Exposure
- V = Unerupted
- O = Erupting

no sign of IS ? presumably N, not unerupted

CARIES occl lan ling	mes dist	A M TOOTH LOSS	ABSCESSSES	PERIODONTAL	PULP EXPOSURE
	0 of 26	0 of 28	0 of 14	none.	0 of 26

CALCULUS <i>none.</i>	BITE	HYPOPLASIA <i>v slight on 6 & 7</i>	3rd M Absence <table border="1"><tr><td>0</td><td>0</td></tr><tr><td>-</td><td>-</td></tr></table>	0	0	-	-	TOOTH ROTATION
0	0							
-	-							
OTHER DENTAL ANOMALIES			CANINE ROOTS <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					

ATTRITION (General)	GRADE (M's)	M ₁	M ₂	M ₃
	PATTERN (M) Upper = U Lower = L	ant  U	 L	 U

OSTEO-ARTHRITIS							VERTEBRAL					Olecranon for; Cleft NA C1 - Cleft NA L5 - <i>LA</i> Separ NA C1 - Separ NA L5 - <i>Sw face</i> Sacral SB - Sacral L5 - <i>Acrom pr</i> L6 -
C			T				L			S		
1 2 3 4 5 6 7	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5										

LONG BONES (p = proximal, d = distal)											
Humerus		Radius		Ulna		Femur		Tibia		Fibula	
L	R	L	R	L	R	L	R	L	R	L	R
OTHER BONES											
Clavicles		Scapulae		Sternum		Pelvis		Hands		Feet	

INJURY / DISEASE
Everything good except sacrum - 1st bod wt fused.

BONES PRESENT: *Skull missing most of occipital, no mandible (tooth crowns present) ST vert, SL vert at frags, R scapula, humerus, radius & ulna, pelvis Lt R femur, tibia, fibula, 2 metacarpals.*



1/PERIOD	2/NUMBER	3/LOCALITY	4/SEX
5/AGE	6/ASSOC	7/CARIES	8/LOSS
9/ABSCESS	10/PERIODONT	11/PULP E	12/3rd M
13/WEAR	14/LAMBD W <input type="radio"/>	15/PAR W <input type="radio"/>	16/COR W <input type="radio"/>
17/INCA	18/METOPISM <input type="radio"/>	19/PAR NOTCH B	20/ORB OSTEOP <input type="checkbox"/> <input type="checkbox"/>
21/T MANDIB	22/T AUDIT	23/T PALAT	24/T MAX
25/PAR FOR <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	26/SPHEN ARTIC <i>normal</i>	27/SPHEN BONES <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	28/SUP ORB FOR <input checked="" type="checkbox"/>
29/GLAB OCCIP L (L)	<i>c. 169.</i>	53/MAX ZYGOM B (J)	
30/MAX HORIZ B (B)	<i>158</i>	54/B of R ORBIT (from Dacry) (01')	
31/MIN FRONT B (B)		55/HT of R ORBIT (02)	
32/MAX FRONT B (B')		56/FORAMINAL L (FL)	
33/BASIO-BREG HT (H')		57/FORAMINAL B (FB)	
34/BAS-NASION L (LB)		58/MALAR HT (MH)	
35/NAS-BREG ARC (S1)		59/MAX B PYRIF AP (NB)	
36/BREG-LAMBDA ARC (S2)		60/NAS-BAS NAS SPINE (NH')	
37/LMDA OPISTHION A (S3)		61/SIMOTIC CH (min B) (SC)	
38/NAS-BREG CHORD (S'1)		62/BR at SUP NAS PNTS (NB4)	
39/DREG-LMDA CH (S'2)		63/BI-DACRYONIC CHORD (DC)	
40/LMDA-OPISTH CH (S'3)		64/BI-CONDYLAR WIDTH (WT)	
41/BI-ASTERIONIC B (BiB)		65/FORAM MENTALIA B (ZZ)	
42/BREG-SPHEN-ARC (P2)		66/RAMUS B (least) (RB)	
43/BREG-ASTER ARC (P3)		67/SAGIT HT MANDIB (H1)	
44/LMDA-ASTER ARC (07)		68/MAX PROJ L MANDIB (ML)	
45/BASIO-ASTER CH (09L)		69/PROJ L LEFT RAMUS (RL)	
46/MAX SQUAM L (A)-(T1)		70/HEIGHT at 2nd MOLAR (M2H)	
47/SPHEN B (pipi) (S4)		71/CONDYLE LENGTH (CYL)	
48/NAS-ALVEOL PNT (G'H)		72/CORONOID HT (CH)	
49/BAS-ALVEOL PNT (GL)		73/MANDIBULAR ANGLE (M/-)	
50/FACIAL BREADTH (CB)		74/DENTAL ARCH L (Cp1 2)	
51/PALATE B (2nd M) (G2)		75/INCISURA HT (IH)	
52/PALATE LENGTH (G'1)		76/MANDIBULAR B (at 2nd M) (G'2)	

FEMUR

MAX L (FeL1)
OBLIQUE L (FeL2)
TROCHANT L (FeL3)
MIN A P DIAM (FeD1)
TRANSVERSE D (FeD2)

TIBIA *362*

MAX L (TiL1)
OBLIQUE L (TiLw)
ARTIC L (TiL3)
MAX A P DIAM (TiL1)
TRANSVERSE D (TiD2)

HUMERUS

MAX L (HuL)
MAX D (HuD1)
MIN D (HuD2)

RADIUS

MAX L (RaL1)

ULNA *265*

MAX L (UIL1)

FIBULA

MAX L (FiL1)

STATURE (and formula employed)

5'5 1/2'

1.665m

(tb)

Banker skeleton from Athavanich, Caithness.

Present: skull, missing almost all of occipital from lambdoid suture to front margin of foramen magnum. No mandible, some teeth. - small frag gonion & R coronoid process.
 5 T vert, 5 L vert - mostly bodies, few arch frags, 1st sacral body
 12 rib frags including 5 articular ends.

Sternum

R scapula - glen fossa, coracoid process, part acromion process

R humerus, missing head. R radius & ulna.

R pelvis - much of ilium, few other frags.

L+R femur dist ends & one half shaft.

L+R tibia - L complete except for prox. lateral condyle, R prox end & shaft.

L+R fibula - prox end & shaft, shaft.

2 metacarpals - III & IV or V.

Few scuffy frags long bone shafts etc.

No brow ridges (mastoids & occipital missing). Limbs fairly small.

1st sacral body looks ♀. pelvis - too incomplete.

Vertebrae very small. ♀.

N8	7	6	5	4	3	2	1		1	2	3	4	e	6	7	8N
	7	6	5	4	3	1		1	3	4	5	6	7			

(lower teeth represented by crowns - root frags on incisors & 1 premolar.)

Caries 0. Abscess 0 in 14 Loss 0 in 26. Periodontal d. none.

Calculus 0. V slight hypoplasia on 6/6 near base of crown.

No sign of LS ? presumably N. not interrupted.



Wormians lambdoid - 0 in small area surviving length at apex.

sagittal - 0. coronal 0

metopic X. inci ? par for X X.

spurious - normal no extra bones sup orb for -/-
 orbital osteoporosis X X.