AHR Report 2697

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MARC 3 R 17 - HUMAN BONE REPORT F. V. H. POWELL

In total thirty skeletons were presented for examination. As well as complete skeletons, four collections of "odd bones" of adult and infant human and also non-human bone were included. Of the adult skeletons three could be identified as female, one as male, and one unidentifiable. The other skeletons consisted of three children under 12 years, one adolescent male of approximately 15 years, and 20 infants of less than 1 year. One cremation was also presented for analysis.

In general the bone preservation was good with most of the skeletons, including the infant skeletons, being complete. Ages were calculated from dental attrition (Brotnwell; 1972) and estimated statures were calculated from Trotter and Gleser (1958). The dental formulae are the same as used by Brothwell (1972). Where possible sexing is based on observations made on the whole skeleton. Where not possible the innominates are used as the most reliable with the skull characteristics and muscle markings used as less reliable alternatives.

SKELETON 1501 500 - This skeleton is of a male aged between 35 and 40 years. The estimated stature is 168.002 cm. or 5 feet 6¼ inches. The muscle markings are moderate throughout the skeleton. No marked abnormalities were observed apart from two instances of ankylosis. The left wrist showed extensive ankylosis with osteoarthritic lipping on the distal ends of the ulna and radius, as well as the carpal bones. The carpals themselves showed healed fractures which indicated a severe trauma. The left elbow joint particularly the proximal end of the ulna, has slight osteoarthritic lipping which may be related as a reaction to the trauma at the wrist. The type and degree of injury suggests a fall forward onto the left hand.

The second instance of patnological ankylosis is to the first metacarpal of the left foot. Boney growths are seen at the distal articulations and the area of the articulation itself has been extended downwards. The cause of this ankylosis is unknown but an injury may again be to blame.

The dental formula is:

∅ 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8
8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8

SKELETON 1507 629 - This is a skeleton of a female of approximately 17 to 25 years and having an estimated stature of 155.8 cm. or 5 feet 1¼ inches. The sexing was based on the skull characteristics as the innominates failed to survive. Reconstruction, using UHU glue, of the skull and mandible had to be done before measurements could be taken.

Slight osteoarthritic lipping was observed at the proximal end of the right humerus and the glenoid fossa of the right scapula, with slight to moderate lipping at both femoral condyles and proximal ends of both tibiae. The lumbar region of the vertebral column shows signs of injury or possible traumatic osteoarthritis. L2 shows marked lipping while the other lumbar vertebrae have slight lipping. L5 is wedge-shaped and compacted.

The major pathological area of this skeleton is of the teeth and alveolar region. There is a high degree of abscessing and ante-mortem tooth loss. Alveolar resorption is marked. The dental formula is:

8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8
8 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8
A A C A	

There is much attrition of the lower incisors and canines. This wear may be attributed to some occupational habit, as in chewing leather for softening, or to constant chewing by the front teeth because of the molar loss. Perio-dontal disease may be the cause of this tooth loss.

SKELETON 1528 574 - Included with this skeleton were several non-human bones - a sheep scapula, several unidentified phalanges, a metacarpal of possibly an ox, and several phalanges and ribs of perhaps the same animal.

The human bones represent the skeleton of a female with an estimated stature of 158.3 cm or 5 feet 2½ inches. The number of teeth and their condition

did not allow for accurate aging. It would be safe to say, however, that the individual was over 25 years.

Arthritic lipping was observed on several of the centra of the vertebral column. The skull was quite thick, having a parietal thickness of 8 mm. with much internal pitting observed on the frontal, parietals, and occipital. One maxillary molar and one mandibular molar both had neck caries and attrition to the dentine.

SKELETON 650 - This is the skeleton of a young female probably of 18 to 20 years. Most of the long bone epiphyses have united but the line of fusion, in most cases, is still visible. The epiphyses of the pelvis have not united. The estimated stature of 162.4 cm. or 5 feet 4 inches. The state of preservation of the skeleton is poor with much shattering. A possible septal aperture may be present on the right humerus but certainty is impossible due to breakage. The skull was extremely fragmented and impossible to mend. Therefore, only the left half of the maxilla was present. Most of the right maxillary teeth were found loose. The mandible is also fragmentary with only the left side being complete. The dental formula is:

~~8 7 6 5 4 3 2 1~~	1 2 3 4 5 ~~6 7 8~~
~~8 7 6 5 4~~ ~~3~~ ~~2~~ ~~1~~	1 2 3 4 5 6 7 ~~8~~

It should be noted that the mandibular left canine has not errupted properly and was still in the crypt completely formed. The maxillary left canine also has not fully errupted and is twisted mesially.

SKELETON 508 - Based on the pelvis and muscle markings this skeleton is probably of a female, however, some pelvic characteristics suggest the possibility that it may be of a male. The estimated stature is 154.3 cm. or 5 feet $\frac{3}{4}$ inches, which furtner suggests a female individual. The line of fusion of the epiphysis of the lesser trochanter of the left femur is just visible, which would indicate that the individual was in her early 20's at the time of death. The attrition on the molars also suggest an age of 20 to 25 years.

A most striking anomaly of this skeleton is a complete metopic suture of the frontal bone. Another anomaly is the sacralisation of the 5th lumbar vertebra.

The dental formula is:

							A							
~~8~~	~~7~~	~~6~~	~~5~~	4	3	2	1	1	2	3	4	~~5~~	~~6~~	7 ~~8~~
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7 8
C	C												C	

The caries in the mandibular molars was all in the neck of the tooth.

SKELETON 174 - This skeleton is probably of an adolescent male of less than 15 years. The estimated stature is 153.8 cm. or 5 feet ¾ inches. The left fibula shows a significant degree of lateral bowing with the bone measuring 8 mm. away from the straight at mid-shaft.

The dental formula is:

												C		
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7 8
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7 8

The left mandibular canine nas an anomaly of bifurcated roots.

SKELETON 505 - This is the skeleton of a child or 8 or 9 years, basing the age on the state of tooth erruption and the non-union of the ischium, pubis, and ilium of the innominates. The estimated stature is 117.8 cm. or 3 feet 10½ inches. It is possible that this individual may be female though the sexing of children's skeletons is very tenuous. Neck caries is present on one premolar. Though the skull is very fragmentary, osteoporosis was observed on the internal surface of the occipital, along the venous sinus.

SKELETONS 126 & 506 - These were skeletons of two young children of less than 12 years. 126 is fragmentary but more or less complete and can be aged at 5 to 6 years. 506 is very fragmentary.

Of the 20 infants of less than one year, the following were complete: 143; 156 (possibly neo-natal); 159; 161; 394; 398; 470; 487; 488; 489; 495; 507; 567.

The following were fragmentary: 266; 420; 457; 460; 509; 531.

The following are collections of "odd bones":

308 - non-human humerus and vertebra

- human frontal and human left proximal end of a femur without the epipnysis

316 - a head of a right femur

419 - a mixture of human and non-human, adult and infant bones

475 - a human frontal and a foot bone of a cow or horse

629 - 3 fragments of a sternum

- 3 rib fragments

- a right clavicle

- 7 metatarsals and several phalanges

- 1 tooth root of a canine or incisor

CREMATION - The contents of pot 133 were presented for analysis. Long bone fragments predominate. A low temperature during burning is suggested by the colour of the bone (white on the surface but black internally) and the absence of any fissuring or heat cracks. Identification of age or sex was impossible.

SKULL MEASUREMENTS

MEASUREMENT	Skeleton 500	Skeleton 629	Skeleton 508	Skeleton 174
L	185	189	174	-
B	145	134	127	120
B'	101	92	91	92
H'	140	141	128	-
LB	98	108	105	-
S_1	135	132	115	-
S_2	130	139	118	116
S_3	119	119	105	-
S'_1	116	116	101	-
S'_2	118	122	104	101
S'_3	93	97	90	-
BiB	108	114	103	-
G'H	67	-	-	-
GL	93	-	-	-
GB	62	-	-	-
G_2	59	-	34	-
G'_1	40	-	-	-
J	116	-	-	-
O'_1	38	-	-	-
O'_2	33	-	-	-
FL	38	37	34	-
FB	29	29	30	-
NB	23	-	-	-
NH'	33	-	-	-
SC	8	-	-	-
DC	23	-	-	-
W_1	-	-	-	108
ZZ	-	-	42	43

MEASUREMENT	Skeleton 500	Skeleton 629	Skeleton 508	Skeleton 174
RB	32	-	-	-
H_1	-	-	29	-
M_2H	27	-	24	27
CH	67	-	56	-
CyL	72	-	54	-
ML	-	-	-	-
M<	-	-	-	-
RL	-	-	-	-

MEASUREMENT	500		629		574		505		650		508		174	
	L	R	L	R	L	R	L	R	L	R	L	R	L	R
FeL_1	446	433	412	410	422	-	259	258	-	-	399	399	-	-
FeD_1	24	24	25	26	25	23	15	16	23	24	22	22	22	22
FeD_2	37	34	34	33	34	35	19	19	32	33	34	35	30	30
Platymeric Index	648	706	735	787	714	657	789	842	718	726	647	629	733	733
TiL_1	373	369	339	-	353	-	206	210	-	-	329	329	-	-
TiD_1	40	39	30	-	39	39	19	20	31	35	38	38	32	33
TiD_2	30	29	29	-	29	29	19	10	22	26	29	31	23	24
Platycnemic Index	750	763	743	-	743	763	1000	1000	709	745	605	815	718	727
HuL_1	311	316	291	302	-	-	185	190	-	311	273	227	269	276
HuD_1	24	25	25	26	22	24	-	13	20	20	22	22	21	22
HuD_2	16	18	16	16	17	17	-	10	16	16	16	15	15	16
Head Diam.	-	-	40	44	42	42	-	-	-	44	40	42	-	38
RaL_1	-	247	216	219	230	-	-	-	-	240	210	210	204	204
UlL_1	253	273	239	240	-	252	150	149	255	-	227	228	229	230
FiL_1	-	-	-	-	-	346	199	197	-	-	316	-	-	-
Clavicle L.	152	147	127	-	-	-	87	86	-	-	129	123	125	123
Glenoid Fossa Length	38	42	38	41	34	35	-	-	-	34	34	34	30	34
Glenoid Fossa Breadth	27	-	27	28	24	25	-	-	-	26	24	24	24	24

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