1682

BEESTON CASTLE - Human bone report

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Two adult skeletons were examined. Both were fairly solid but were a little eroded, especially at the articulations.

Burial 1 (BC 72 437 & 438)

This skeleton was found in a wooden coffin and is probably of 17th century date. It is probably male and aged 17-25 on the basis of dental wear.

The skull contained a large number of wormian bones; 8 loose and 2 partly fused ones in the lambdoid suture, one in the saggital suture and one parietal notch bone on the right side of the skull. There was also a roundish hole about 2cm across on the line of the lambdoid suture. The upper side of the hole (in the parietal bone) is rather irregular in outline and may represent the suture of another wormian bone that has become eroded. The edge shows only a few small areas of cancellous bone. By way of contrast the lower edge of the hole is far more regular and shows cancellous tissue all round. The hole could have been made post mortem.

The dental formula is as follows:-

	OC E A
3 7 6 5 4 3 2 1	1 2 3 4 5 6 7 8
(8) 7 6 5 4 3 2 1 LC LC DC MC	1 2 3 4 5 6 7 8 NP

Molar Wear:(1)

M_1 = 2+

M_2 = 2

M_3 = 2

○ = tooth erupting
NP = tooth not developed
A = abscess
E = pulp cavity exposed

LC = labial caries
MC = medial "
DC = distal "
OC = occlusal "

There was slight evidence of peridontal disease and slight deposits of calculus on the teeth which also showed a medium amount of hypoplasia. $\overline{1}1$ and $\overline{3}1$ were rotated. There was slight overjet with the upper anterior teeth coming in front of the lower ones when the mandible was articulated.

The maximum estimated stature, using Trotter and Gleser's formulae for white American males is 166 cm. (5'5").(2)

There is very little sign of degenerative joint disease (osteo-arthritis), slight traces being visible on a few ribs and on a few thoracic vertebrae. The arch of the first sacral vertebra is not fused.

Burial 2 (BC 72 2144 & 2145) --

This skeleton is of unknown date. It is that of a male who died in his twenties.

The skull, like that of burial 1, contained many wormian bones. There are 7 in the lambdoid suture and one in the saggital suture. In addition there are 2 parietal notch bones and 2 squamo-parietal ossicles, one on each side, and an epipteric bone on the left side.

The dental formula is:-

OC	OC A DC OC
/8 7 6 5 4 3 2 1	/ 2 3 4 5 X 7 8
8 X 6 5 / 3 2 1 OC E	1 2 3 4 5 6 7 8

Molar Wear:(1)

M_1 = 3

M_2 = 2+

M_3 = 2

/ = post mortem loss

X = ante mortem loss

There is very slight overjet of the upper teeth. Slight hypoplasia is visible on the first and second molars and slight calculus on most of the teeth. In general peridontal disease is medium but it is severe in the region of $\underline{6}$ and $\overline{7}$. The abscess associated with $\underline{6}$ may have healed.

The maximum estimated stature is 176 cm. (5'9")(2). There is slight evidence of degenerative joint disease on the lower vertebrae and on some ribs. The hands are also slightly affected.

I am grateful to Dr. J.L. Price of the Royal Surrey County Hospital for the following radiology report:

"There is corticated new bone formation on the outer mid shaft of the left femur. The original cortex is narrowed with an ill-defined outer margin. The outer cortical bone is smooth and merges with the upper cortex but at the lower end there is a notch. From this it appears that the periostium and some cortical bone has been elevated from below and new bone formed underneath. One could speculate that trauma from a sharp implement directed upwards could produce this effect. Repetitive trauma is possible but unlikely at this site. There is no radiological evidence of infection.

There is a healed fracture, many years old, of the lower third of the shaft of the right ulna.

There is some erosion and an irregular periostial reaction of the mid shaft of the right fibula. A long standing adjacent soft tissue inflammatory process is the most likely cause."

References:

(1) Brothwell, D.R. (1963) Digging up bones p.69
(2) Trotter and Gleser (1958) Amer. J. Phys. Anthrop. pp.79-123