Ancient Monuments Laboratory
Report 8/95

A MEDIEVAL BURIAL RECOVERED DURING THE 1988 EXCAVATIONS AT FOUNTAINS ABBEY, NORTH YORKSHIRE

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Summary

A skeleton was recovered from the eastern cloister alley at Fountains Abbey. Examination of the bones revealed that the interment was a male who was probably aged about 30-50 years at death. He suffered from *hallux valgus*, lateral deviation of the big toe, accompanied by a bunion at its base. This was almost certainly caused by habitual wearing of shoes which constricted the toes.

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A Mediaeval burial recovered during the 1988 excavations in Fountains Abbey, North Yorkshire

Context: 1046, extended inhumation, orientated west-east, in eastern range of cloisters.

The skeleton: The bones are poorly preserved with significant soil erosion. Many show black staining, particularly the skull.

Sex: Male (Brothwell 1981).

Age: Molar wear (Brothwell 1981: Fig. 3.9) suggests 25-35, however cranial suture closure (Perizonius 1984) is consistent with a middle aged adult. There is extensive ossification of costal cartilages, a phenomenon which is not usual until at least middle age. Thus 1046 would appear to be best classified as about 30-50 years of age at death.

Stature: 162cm (5'4") (estimated from long-bone length, using the formulae of Trotter & Gleser 1952, reproduced in Brothwell 1981).

Dental formula:

.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
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

LEFT RIGHT

Key: .=tooth present in socket; X=socket present but tooth missing post-mortem; C=caries cavity

Notes: The left first metatarsal shows lateral deflection of the proximal hallucial phalanx; there is also slight osteoarthritis at this joint. There is a small cystic erosion on the medial side of the head of the metatarsal. The right first metatarsal shows slight lateral deflection of its distal joint surface, but is otherwise normal.

The above changes are consistent with hallux valgus. This is the lateral deviation of the big toes, often accompanied by formation of bunions, caused by tight-fitting footwear. It would seem likely that burial 1046 from Fountains Abbey habitually wore footwear which constricted the toes. Hallux valgus has been found by the writer to have a frequency of about 8% in adult skeletons from a Mediaeval urban group (Mays 1991) and 3% in a large series of Mediaeval peasant skeletons from Wharram Percy (Mays, in prep). In both assemblages most cases were males. Artistic representations and archaeological finds of footwear confirm that shoes which must have constricted the toes were worn in Mediaeval times (Steane 1985: 282-283).

There are several faint transverse lines on the anterior dentition. These are hypoplastic lines, and they form as a result of growth disturbances to the teeth. Such growth disturbances may occur due to poor nutrition or infectious disease during the period in which the tooth crowns were forming (Skinner & Goodman 1992), in the case of the permanent anterior teeth, from about 1 - 4½ years. Dental enamel hypoplasias are frequent findings in archaeological material.

There were, in addition, several minor pathologies and anomalies present in this skeleton. Data on these, together with those on the metric and non-metric variables, may be found in archive at the Ancient Monuments Laboratory, English Heritage.

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