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EXCAVATIONS AT SOUTHWICK HILL CROSS-ROADS, PORTSDOWN, PORTSMOUTH

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with a report on the skeletal remains by C B DENSTON

ABSTRACT

Archaeological investigations in advance of extensive road work revealed an Early Bronze Age inhumation, accompanied by two accessory vessels: a double ended incense cup, of a type previously ascribed to the Wessex Culture, and a simple bucket shaped miniature vessel. Several pairs of post holes, which have been interpreted as corn or hay drying racks of Early Iron Age date, were also discovered.

INTRODUCTION

The site was located at NGR SU 6490 0657, on the crest of Portsdown, immediately to the north of the intersection of the A333, Southwick Road and the Portsdown Hill Road (Fig 1). In August 1972 Portsmouth City Museums were notified by the City Engineers Department of impending roundabout construction at the intersection. The archaeological potential of the area was immediately apparent. Previous improvements to the junction in 1948 and 1956 had led to the discovery of an Anglo-Saxon cemetery with approximately 20 interments, a cremation with associated grave goods of the Wessex Culture, an undated cremation, a feature containing burnt flints and a pit containing a Bronze Age food vessel (Corney *et al* 1967). In addition the museum collections contain sherds of Iron Age pottery found in this area on two previous occasions, in one case from a post hole sectioned by road widening. Finally, Grinsell reported the presence of a bell barrow, eighteen paces in diameter by 2ft high at SU 6491 0658 in the late 1930s (Grinsell 1940) although this was no longer visible by 1972.

The excavation was carried out in late September 1972 by Portsmouth City Museum staff prior to the first phase of the road improvement. The site was subsequently destroyed by this work. The finds and records from the excavation are held at Portsmouth City Museums.

THE SITE

Portsdown is a ridge of chalk running ESE – WNW for some 10km between Fareham and Havant along the heads of Portsmouth and Langstone Harbours and the low lying Portsea Island. It represents a prominent part of the more extensive Portsdown Anticline. To the south the down drops away rapidly to the harbours and to the north to the clays, sands and gravels of the Tertiary beds. The crest of the down is still largely undeveloped and the land not under plough supports a scrub vegetation much as it is likely to have done in the prehistoric period before it was modified by man. The tertiary beds would have had a heavy forest cover, part of which survived as the Forest of Bere until this century.

The site lay on the crest of the Down at 107m + OD, 2.2km east of its highest point at 152m + OD. It is an exposed site open to the prevailing south-westerly winds.

THE EXCAVATION

An area of approximately 1,230 sq m to the north of the B2177/A333 junction was stripped mechanically and the surface of the chalk was then cleaned by hand. The overlying top soil varied in thickness from as little as 5cm up to 15cm. From the mixed nature of this soil it was clear that it had been thoroughly disturbed in

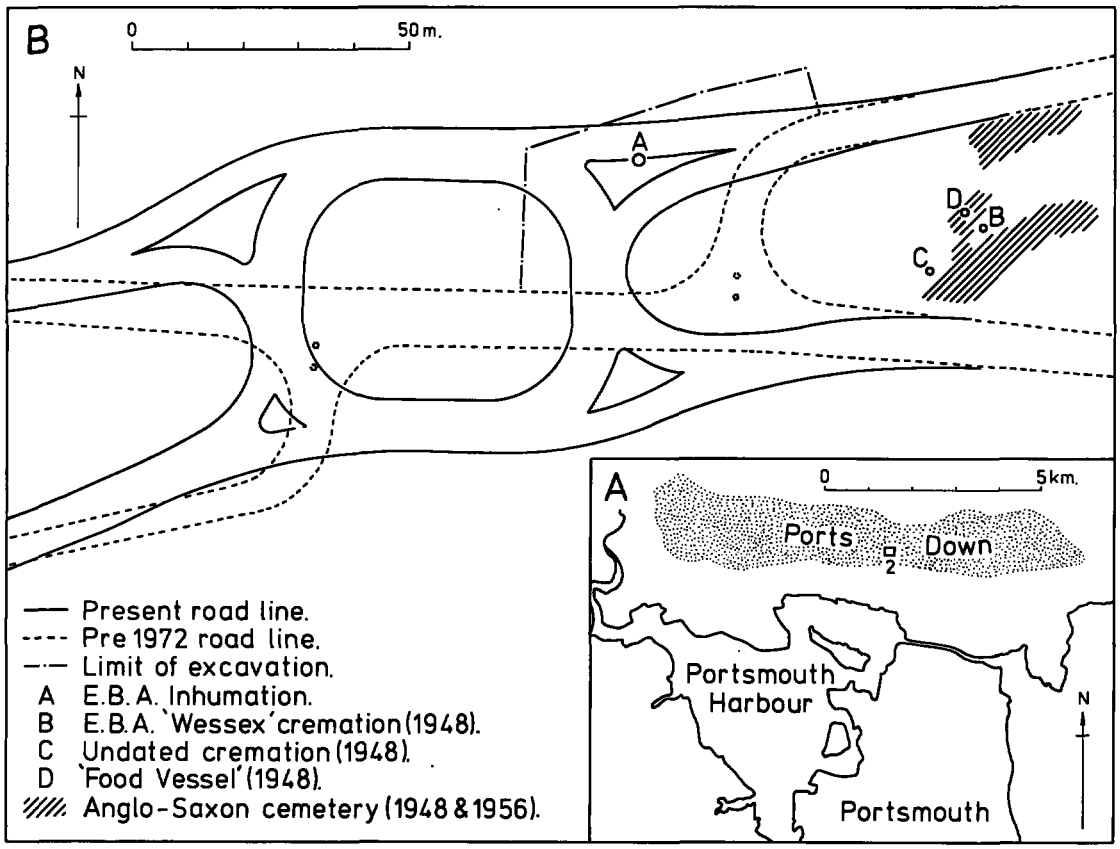

Fig 1. Southwick Hill Cross-roads: General location plans **A**: Portsdown area **B**: Relationship of site to old and new road lines and previous archaeological features.

the past. This was evidenced by shallow gulleys which were seen to cut the site in an approximate east–west direction (Fig 2). Metalwork from these suggested they were of 19th century date and it is believed that they represent part of the extensive work that took place on Portsdown during the building of the Palmerston forts in the 1860s which included clearing the scrub cover from between the forts. The site lies on a line between Forts Widley and Southwick.

The cleaned down chalk surface revealed in addition to the above gullies a number of features cut into it: a grave, pits and post holes, all of which were excavated.

The Bronze Age Features

The grave (Fig 3) was of irregular outline with its floor set into the present chalk surface by some 7.5cm at the north-east end and level with the surface of the chalk from midway along its length. The southern third had been cut away by a 19th century gulley. In consequence, the skeleton that it contained was in a poor state of preservation. Nevertheless, enough remained to show that it was lying on its right side with its head to the north-east. The position of fragments of one ulna and radius suggested that one arm was bent up towards the chest whilst the position of fragments of tibia and fibula indicate

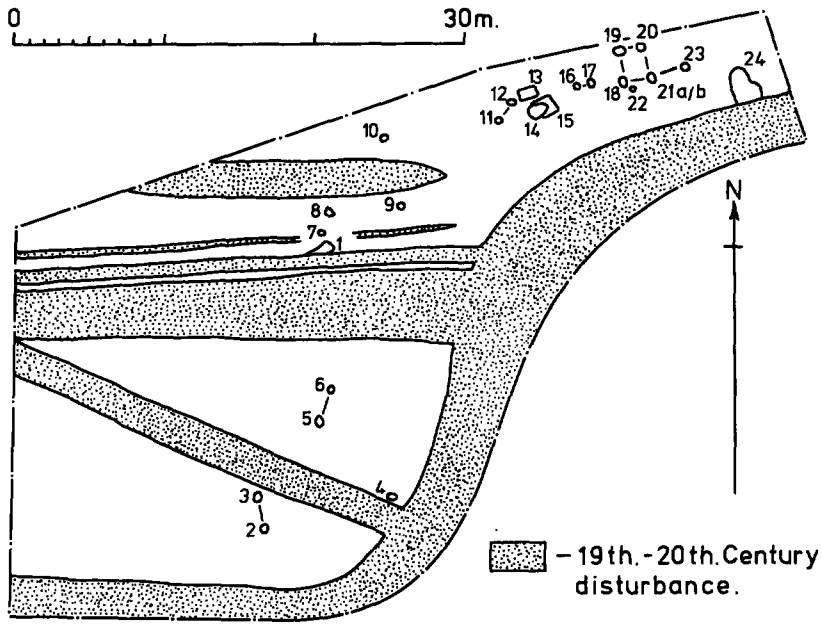

Fig 2. Southwick Hill Cross-roads: Site plan showing Bronze Age grave (1) and pit (8) and Iron Age post holes (2–7, 9–12, 16–23) and pits (13–15 and 24). (Scale 1:500)

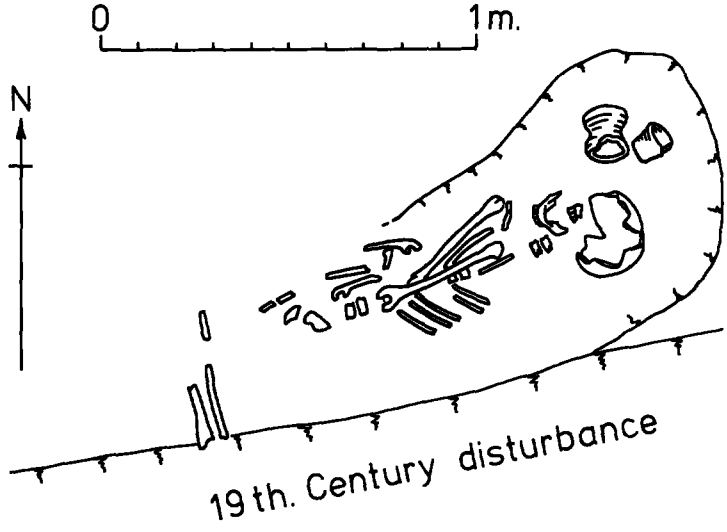

Fig 3. Southwick Hill Cross-roads: The Early Bronze Inhumation. (Scale 1:20)

that the legs may have been bent, the whole body thus being in a semi-flexed position. However, the skeleton was too badly disturbed to be certain of this. Fortunately, as the head end of the grave was slightly deeper, two accessory vessels which had been buried adjacent to the forehead of the body had escaped largely intact. It is clear from these two vessels, considered below, that the burial is of Early Bronze Age date. Analysis of the skeletal material (see below) revealed that it was of a tall female of between 15 and 17 years of age. The skeletal material was submitted to the British Museum Research Laboratory for radio-carbon analysis. A determination based on collagen from post-cranial bones gave the following date:

3009 ± 57 BP (BM–1119)

Immediately to the north of the head end of the EBA grave was the base of a pit of triangular outline with sides of *c* 30cm and cut *c* 4cm below the surface of chalk. This contained the truncated base of a possible BA vessel, discussed below.

The Early Iron Age Features (Fig 2)

The Iron Age features comprised post holes and shallow pits or depressions. Eighteen post holes were discovered. All were ovoid in plan with their average longer axes measuring 50cm. They varied in depth from 15– 45cm. In five of the holes, 3, 5, 6, 17 and 18, there was a packing of flint nodules leaving a post pipe of approximately 10cm diameter. One post hole, 21 a/b had been re-cut.

The majority of the post holes were arranged in pairs, 2–3, 5–6, 11–12, 16–17 and 21b–23. The grouping of 18, 19, 20, 21a is ambiguous and may represent either two north-south pairs, two east-west pairs or the plan of a four post structure. The fact that 19–20 had their longer axes running east-west and had no flint packing, whereas 18–21 had their longer axes running north-south and had flint packing, tempts one to see them as two east-west pairs: 19–20 and 18–21a. The spacing between paired post holes falls between 1.1m and 2.3m with an average of 1.85m.

There were five single post holes but as the majority of these were adjacent to later disturbance it may be that each was originally one of a pair. Four shallow pits were discovered, none being deeper than 25cm. They were filled with granular grey-brown soil and flint nodules with small fragments of pottery and charcoal.

THE FINDS

The Bronze Age Pottery (Fig 4)

1. Double ended incense cup, 61mm high with a maximum diameter of 67mm and a minimum waist diameter of 50mm. The upper and lower ends are not quite symmetrical with one being 3mm deeper than the other and having more curved walls. The fabric is lightly grog-tempered, with a dark grey core and a slightly burnished surface, ranging from pinkish buff to pinkish grey. The surface decoration consists of twelve encircling lines of twisted cord impression. This had been produced by a double strand, clockwise twisted cord with approximately 3–4 twists per cm, the individual fibres of the strands being visible in the impressions. Two similar circles of twisted cord impression decorate the upper and lower rims. In addition, there are four rows of circular impressions *c* 3mm dia made by a stamp, probably a bird bone. When excavated all the above impressions were filled with chalk whereas the surface of the vessel was elsewhere relatively clean of such deposit. It is possible that this represents an original, deliberate, decorative encrustation as has been seen in some beakers (Clarke 1970) and Aldbourne cups (Piggott 1938) although deposition by ground water rich in calcium carbonate cannot be ruled out.

2. Miniature vessel in the form of a simple urn. There is a roughly formed shoulder beneath a distinct neck and slightly everted rim. The top edge of the latter is bevelled on the outside. The fabric is very sparsely tempered with grog and some calcined flint particles. It has a dark grey core with a pinkish buff to grey surface.

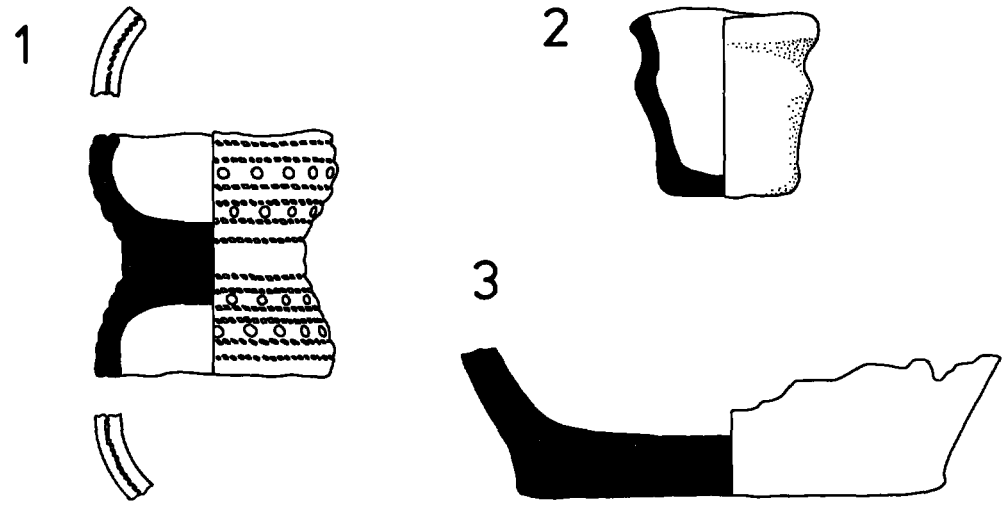

Fig 4. Southwick Hill Cross-roads: The Bronze Age Pottery. (Scale 1:2)

3. Base of a hand-made vessel in soft dark grey fabric with an orange red oxydised outer surface. Copiously tempered with fine pink grog fragments and some calcined flint. The minimum base thickness is 16mm and the wall 10mm.

The Iron Age Pottery (Not illustrated)

Approximately 200g of Iron Age pottery was recovered from the features on the site.

This was divisible into four distinct fabric types:

a. Hard fine, sandy fabric with sparse flint tempering. Slight surface burnishing. Grey/grey-buff.
b. Hard fabric with very sparse red grog and fine flint tempering. Dark grey core with orange-buff outer surface.
c. As above but without the grog tempering.
d. Hard sandy fabric with copious flint tempering of assorted size. Dark grey core with purple and buff outer surface.

Unfortunately, the pottery consisted entirely of body sherds which gave little indication of the form of the original vessels. However, the fabric range is similar to that of pottery from other Early Iron Age sites in the area now in the collections of Portsmouth City Museums.

DISCUSSION

The features discovered on the site indicate two distinct phases of prehistoric activity. The earlier is of Bronze Age date and of a funerary nature whilst the latter is of the Early Iron Age and agricultural.

The Bronze Age inhumation was very close to the ground surface when excavated but it is highly probable that it was originally interred beneath a round barrow although neither this nor a surrounding ditch were observable. Grinsell recorded a bell barrow in the immediate area in the late 1930s (Grinsell 1940) which has since disappeared and he noted several others elsewhere on Portsdown that are no longer to be seen. However, it is surprising that all traces of the surrounding ditch should have disappeared. If the ditch had been shallow then intensive agriculture may have been sufficient to remove it totally as it almost had the inhumation.

It is probable that this and the Bronze Age features discovered in the 1950s (Corney *et al* 1967) were all part of a small barrow cemetery. It is interesting to note the presence of a pagan Anglo-Saxon cemetery immediately to the east of these Bronze Age features. Elsewhere in the region pre-existing Neolithic and Bronze Age

barrows such as Bevis' Grave long barrow, Portsdown (Rudkin forthcoming) and the round barrow at Snell's Corner, Horndean (Knocker 1956) have acted as foci for Anglo-Saxon cemeteries.

The Bronze Age cremation discovered in 1956 was considered to belong to the Wessex Culture owing to its associated grave goods: a slotted incense cup, a gold encased lignite button and beads of lignite and amber. It is suggested that the inhumation is also of the Wessex Culture.

Of the two vessels associated with this inhumation the miniature vessel has no close parallels. All that can be said is that its form echoes that of both simple food vessels, as at Collingbourne Kingston, Wilts (Annable & Simpson 1964), and collared urns, as at Bincombe Hewish, Dorset (Abercromby 1912), and thus is likely to be of Early Bronze Age date.

The double ended incense cup however, does have quite close parallels. It is similar in size, form and to a certain extent in decoration to four other incense cups from Lake, Winterbourne Stoke and Stonehenge, Wilts. and Dorchester, Dorset. Piggott has ascribed these to the Wessex Culture (Piggott 1938), believing that they evolved from the French vase support type. Indeed, he saw both these and the Aldbourne and grape cups, with their incised and pointillé design, as demonstrating the influence of the Breton Early Bronze Age which he believed was the formative influence behind the Wessex Culture.

It now appears that the concept of a single Wessex Culture was over-simplistic. Burgess argues that there are two broad categories of burial represented in Piggott's material (Burgess 1974) and that the term 'Wessex Culture' should only refer to the category with the 'richer' graves containing grooved daggers, grape, Aldbourne and slotted cups, sheet gold, halberd pendants, perforated whetstones, bone tweezers and dress pins of central European influence.

The Wessex Culture has also been divided into two chronological phases. ApSimon (1954) and Burgess (1974) have suggested that these can be identified with two separate groups of burials. The earlier, 'Bush Barrow Group' contains either inhumations or cremations associated with gold work, Bush Barrow daggers, small flint axes, amber spacer plates, grave cups, axe and halberd pendants and simple stone battle axes. The later, 'Aldbourne–Edmondsham Group' contains cremations, Cammerton-Snowshill daggers, Aldbourne cups, bone tweezers and developed battle axes. However, there is a certain amount of overlap between the two groups. If it is accepted that the double ended cup from the Portsdown inhumation can reasonably be classed as one of Piggott's group, and the writer believes that owing to its very unusual form it can, then the contexts of the four similar vessels should help to indicate to which of the above two groups both they and it belong. Unfortunately, of these, the first three are of limited value: the Dorchester vessel was probably found behind Wareham House in the Max Gate Cemetery and was originally thought to be Roman (S Smith pers comm). The Stonehenge vessel came from 23″ below the surface of Aubrey Hole 29, which also contained calcined bones (Hawley 1923). If this was not a later insertion, and there was evidence for the insertion of a later cremation, then the filling of the hole acts as a *terminus ante quem* for the cup. The vessel from Winterbourne Stoke G65 was associated with a primary cremation beneath a 'flat, circular barrow' (Colt Hoare 1810). It is the Lake (Normanton H21) vessel that is most helpful. It came from beneath a barrow in association with an inhumation, a crescentic spacer plate necklace, four disc-shaped gold ornaments, bronze awl, possible segmented faience beads and a small collared urn (Moore 1810). This would place it firmly in Burgess's Bush Barrow Group.

In consequence, it would be tempting to suggest that all the double ended cups including the Portsdown example should be allocated to this earlier grouping. Unfortunately, the radio-carbon determination from Portsdown does not bear this out. At 3009 BP ± 57 it is the youngest date so far recorded from a Wessex Culture context. Admittedly, as yet, there are very few dates for comparison:

Butterbump, Lincs (May 1976)	3700 BP ± 180
Stonehenge, Wilts	I–2445 3190 BP ± 105
Hove, East Sussex	BM–682 3189 BP ± 46
Earls Barton, Northants	BM–680 3169 BP ± 51
Edmondsham, Dorset	BM–704 3069 BP ± 45

The latter three dates and possibly also the first are obtained from material associated with a Cammerton-Snowshill dagger and thus fall into Burgess's Aldbourne-Edmondsham Group whilst the Stonehenge determination is for the Phase IIIb/IIIc transition. If the Portsdown inhumation is of the Wessex Culture then the radio-carbon date indicates that it belongs to the very end of the Aldbourne-Edmondsham Group.

The Iron Age features discovered on the Portsdown site probably represent agricultural activity in the Early Iron Age. Whilst it must be remembered that post holes may be interpreted in a variety of ways (Ellison & Drewett 1971) the most likely explanation for the paired post holes is that they are the remains of corn or hay drying racks of the type first recognised at Little Woodbury (Bersu 1940) and still to be seen in use in Europe today. The single post holes may have either had a similar function or supported the central pole around which haystacks were built (Reynolds 1979). The exposed nature of the Portsdown site would have made it ideal for crop drying.

Whilst it would be possible to interpret post holes 18, 19, 20 and 21 as the remains of a four-post structure it is unlikely to have been a raised granary as such slender posts would have been incapable of supporting the lateral thrust of the stored grain. The pits discovered have no obvious function.

ACKNOWLEDGEMENTS

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APPENDIX

Report on the skeletal remains by C B Denston (Report dated May 1973)

The reconstruction of the remains, in so far as it was possible, produced a nearly complete humerus from which a tentative stature of the individual could be computed. The fragments of the skull were reconstructed into a fairly good mandible, and at least a calotte (cranium minus facial and basal portions), features of which indicated more positively the sex of the individual it represented. The rest of the material remained as fragments. The partial reconstruction of the cranium revealed that some *post mortem* distortion had occurred, the possible cause being pressure from the earth it was buried in.

Features of the skull overwhelmingly suggested the individual was female, this being substantiated by the lack of robustness and size (metacarpal and phalanges, portions of vertebrae for instance) of various bones.

The humeri were the best preserved of the long bones, the right one producing a maximum length measurement of 340mm. Using the Trotter–Gleser formulae the estimated reconstructed stature tentatively came to 5′8″. At present, it seems that no mean estimated stature for English Bronze Age females exist, but a mean of approximately 5′8″ has been computed from a sample of eighty male femora (Don Brothwell pers comm). This then would make this individual quite tall for a Bronze Age female, as mean statures for female populations are usually a few inches less than male means.

The age at death was mainly ascertained from the state of eruption and amount of formation and attrition of the dentition. The fact that the second molars were functionable and attritional facets visible on the cusps, suggested an age of a few years onwards of the twelfth year. The third molars had not erupted, but the advanced state of formation of these teeth confirmed the age suggested from the amount of attrition, the age of death seemingly in the region of 15–16 years. Epiphyseal union to the shafts of post-cranial bones indicated a similar age. Evidence though of the closure of the basisphenoid suture of the cranium, suggested the age of death could have been higher and at least seventeen.

The possibility arose that this young female individual lived her short life free of any serious illness. Her oral health must have been quite good as there was no tell-tale evidence of caries, abscesses or periodontal disease. This was also inferred by the

lack of any disclosing evidence on the crowns of the teeth (hypoplasia being in mind).

Hypoplasis: teeth may often be seen with lines or ridges running horizontally across the enamel, a condition due to some short term disease, or a dietary deficiency. The growth of teeth is, however, influenced by a great number of hormonal and dietary factors, disturbances in any of which will produce hypoplasis; moreover, the degree of hypoplasia and the number of teeth involved vary considerably, depending on such factors as the number of teeth fully formed at the time when the hypoplasis-inducing factor is at work (these will not, of course, be affected) and how the causative factor is at work. This is the stage of hypoplasis visible to the eye.

The condition described above was lacking on all the erupted teeth, but a single line on two of the crowns of the unerupted molars were suggestive of hypoplasia. These lines, if hypoplastic, occurred when the crowns of the third molars were three quarters formed, and at an age of possibly between eleven and twelve years.

An interesting feature was evident in the maxillary dentition, this in the form of a six cusp third molar. This type of cusp pattern is said to be uncommon in modern and prehistoric man. The last time the writer noticed this condition was a number of years back, and was a Y6 cusp formation of two mandibular first molars of a Bronze Age female excavated among a series of skeletons at Normanton, the age at death being similar to this individual.

Both humeri at the distal extremity, and in the region of the coronoid – olecranon fossae, were characterized by a perforated hole (epitrochlear foramen). This condition is thought almost certainly to be congenital in origin.

Sex: Female
Age at Death: 15–17 years
Stature: Tentatively 5'8".

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