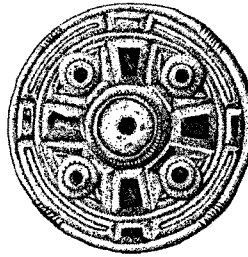


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Archaeological Field Unit

## Eighteenth Century Burials at Old Addenbrooke's Hospital

K Welsh

1994

**Cambridgeshire County Council**

Report No. A43

*Commissioned By Lynxvale Ltd*

**Eighteenth Century Burials  
at Old Addenbrooke's Hospital**

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## SUMMARY

*In August 1994, the Archaeological Field Unit of Cambridgeshire County Council was called to the Old Addenbrooke's Hospital site (TL 4510 5787), after workmen found human remains whilst digging a sewer trench. The site is being re-developed by Lynxvale Ltd. In co-operation with Fitzroy Robinson, the architects, and Laing, the main contractor, it was decided to widen the sewer trench as far as possible so that the affected burials could be excavated and removed from site.*

*In all, five skeletons were revealed, all of which had been disturbed to a greater or lesser degree by nineteenth and twentieth century activity, and especially by the digging of the sewer trench.*

*Fragments of post-medieval pottery were found within the backfill of the graves, indicating that the burials are not associated with the medieval religious foundations which had occupied parts of the site. Documentary evidence strongly suggests that the burials are those of patients of Addenbrooke's Hospital who died during the years 1772-1778. During this period, those who died without a subscriber to pay for burial were interred in the hospital grounds as a cheaper alternative to burial in nearby St Benet's churchyard.*

*Human remains unearthed in 1895, during construction of a nurses' hostel, and at the time interpreted as medieval, probably date from the same period.*

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## 1.0 INTRODUCTION

At the beginning of August 1994, a human skull and other skeletal remains were found while digging a sewer trench during building works at the Old Addenbrooke's Hospital site in Cambridge (TL 4510 5787). The police were called and they, in turn, rang the County Archaeology Office who put them in touch with the Archaeological Field Unit (AFU). After an initial site visit it was soon clear that the remains were not, as the police feared, recent victims of foul play, but were buried in Christian fashion, orientated roughly east to west with the head at the west end.

It was felt that the best course of action would be to widen the sewer trench so that those burials which would be disturbed by the trench could be excavated and removed as soon as possible. The remains of five individuals were found, although only two were relatively complete.

In spite of the delay caused to the building works, all those concerned (Lynxvale Ltd, who are developing the site, Fitzroy Robinson, the project architects, and Laing, the main contractor) were sympathetic to the need to carry out an emergency excavation, and co-operated wherever they could.

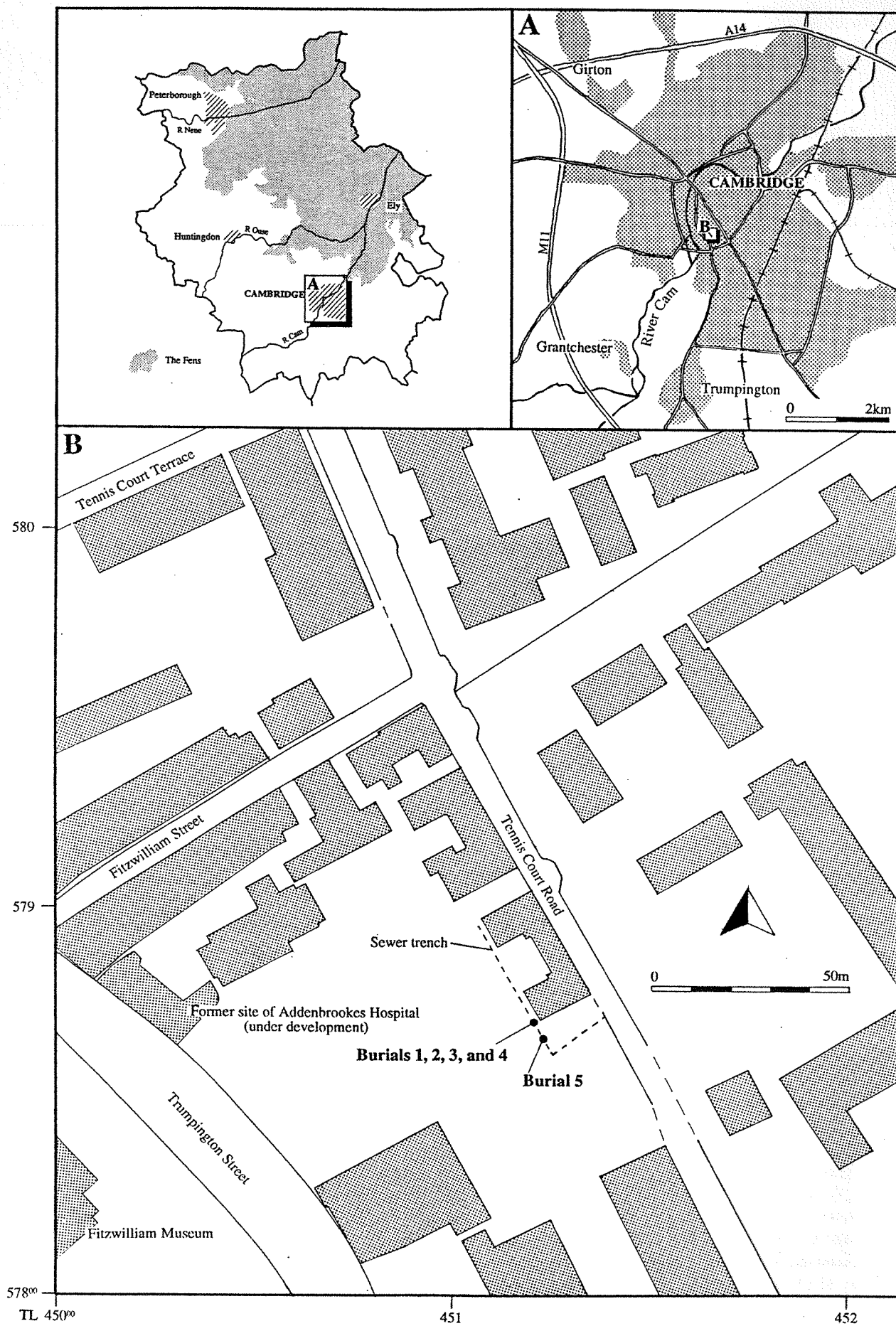
## 2.0 BACKGROUND

During the early part of the thirteenth century, documentary references indicate that a private chapel, dedicated to St Edmund, stood on the site of Old Addenbrooke's Hospital. It was owned by the St Edmund family (who presumably took their name from it), an important Cambridge family, one of whom, Robert of St Edmunds, was the mayor of Cambridge in 1258. The chapel and surrounding land remained with the family until, in 1291 or a little later, it was given to Gilbertine or White Canons who had founded a priory in Cambridge shortly before.

The priory never became rich and remained a subsidiary of the original house of the Gilbertine order at Sempringham, Norfolk. The last prior was pensioned off in 1539 (Haigh, 1988).

The Hospital of St Anthony and St Eloy was founded as a leper hospital by a bequest from Henry Tangmere, who died in 1361. It was situated at the corner of Trumpington Street and Lensfield Road and a chapel dedicated to St Anne stood just to the south. By the mid-sixteenth century, it had become a poor almshouse. The hospital buildings probably stood until they were demolished in 1852.

John Addenbrooke was born in 1680 in Staffordshire. He was admitted to Catherine Hall (later St Catharine's College), Cambridge in 1697 and graduated in 1701. After becoming an extra-licentiate of the College of Physicians of London in 1707, he practised medicine in Cambridge until 1711 after which he left Cambridge and settled in London (Rook *et al*, 1991). When he died in 1719, John Addenbrooke left his estate to erect and maintain a hospital for the poor in Cambridge. By 1741, land had been acquired on Trumpington Street, but the trustees, charged 'to hire, fit-up, purchase or erect a building fit for a small physicall hospital for poor people', carried out their task with such lack of haste that the hospital did not open until 13th October, 1766 (*op cit*). Due to financial difficulties, which continued for many years, the hospital was largely funded by



**Figure 1** Location map

public subscription. The subscribers included the clergy, college fellows, and several Cambridgeshire parishes.

In 1895, a new nurses' hostel, the Peckover Home, was built next to Tennis Court Road, and during construction work human remains were discovered. At the time, they were thought to be associated with the Chapel of St Edmund. It was recognised that some of the bones were those of women and it was therefore felt that they may have dated from the period before the White Canons moved to the site.

After the Second World War, plans were made to re-build the hospital. At the beginning of the 1960's, work finally began on New Addenbrooke's Hospital and, in 1984, the last patient was moved from the old Hospital to the new site on Hills Road.

### 3.0 METHODOLOGY AND CONSTRAINTS

The AFU were called in to the site (*Figure 1*) on 3rd August 1994, after human remains were seen in the spoil excavated from a sewer trench. The police were concerned that the remains were recent. A brief examination of the side of the trench showed extensive disturbance by nineteenth century, or slightly later, pits. At first it was not possible to determine whether the skeletal material came from one of these pits or from elsewhere. However, on clearing the bottom of the trench a relatively intact skeleton was found, apparently buried in the normal Christian way, and stratigraphically earlier than the pits seen in section.

On this basis, the police were advised that the remains were an archaeological, rather than a criminal, matter and they left the site, much relieved.

It was decided that the excavation of the sewer trench should continue, under archaeological control, so that the number of burials affected could be determined and a strategy for their excavation and removal developed.

It became clear that only a limited number of burials were present, close to the south-west corner of the old nurses' hostel. Using a mechanical excavator, provided by Laing, the sewer trench was widened towards the west, but this was limited by the presence of a second foul water pipe. It was not feasible to extend the trench towards the east because of the proximity of the old hostel. As a result, it was impossible to reveal the full length of the burials. It was necessary to shore up the trench because of the depth and instability of the sides.

Once the trench was widened, and the sides shored to prevent collapse, its base was cleaned by hand and photographed. The burials were excavated and recorded. Site drawings of skeletons can often, even in good conditions, be inaccurate as well as being extremely time-consuming. In this case, conditions were far from ideal, with extremely limited space and difficult working conditions. The individual burials were, therefore, re-photographed using accurately located 'targets' so that the resulting images could be rectified and plotted using software originally developed for the rectification of oblique aerial photographs. The outlines of the long bones and skull (where possible), as well as the positions of the targets, were planned at a scale of 1:10 to provide a control for the plots.

As the trench sides were obscured by the shoring sheets, the sections could not be recorded in the usual way, and it was only possible to make rough sketches of the deposits revealed.

The skeletons were then lifted and carefully bagged, before being removed from the site.

After washing, the skeletal material from the *in situ* burials was sent to C Duhig for analysis.

#### 4.0 RESULTS

##### Burial 1

Skeleton 1, Fill (7), Coffin (8), Cut 9. Supine, extended. Orientated north-east to south-west. Truncated by sewer trench, legs extended beyond the section to the east - only parts of skull visible in plan. Pelvis, both femora and patellae, and some hand bones were recovered from section. Some coffin fittings were recovered but not recorded *in situ*. Female. Age at death, <30 years.

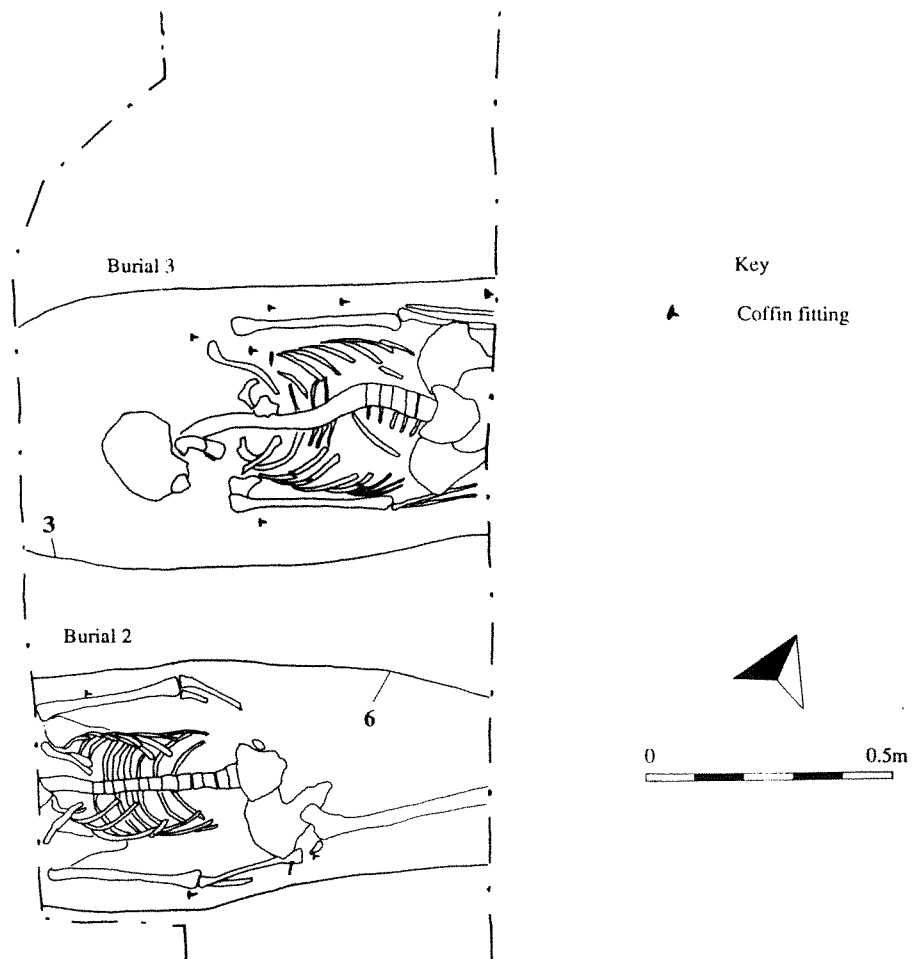


Figure 2 Burials 2 and 3



### Burial 2 (*Figure 2*)

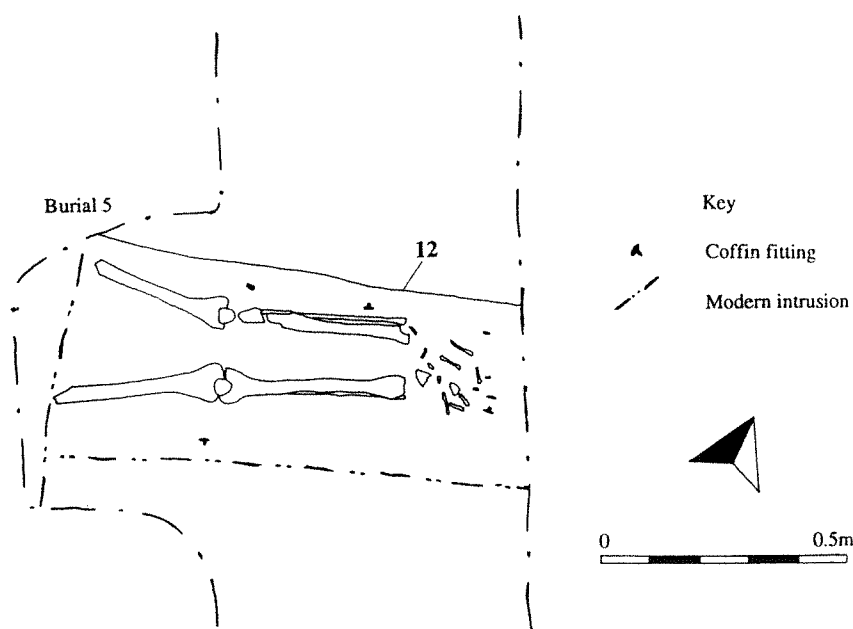
Skeleton 2, Fill (4), Coffin (5), Cut 6. Supine, extended. Orientated north-east to south-west. Damaged by sewer trench, legs extended beyond the section to the east - the hands, one femur, the lower legs and feet were not collected. A fragment of copper alloy pin was recovered. Coffin remains included iron nails and a fragment of decayed wood. Female. Age at death, approximately 16 years.

### Burial 3 (*Figure 2*)

Skeleton 3, Fill (1), Coffin (2), Cut 3. Supine, extended. Head turned to right. Orientated north-east to south-west. Extended beyond section to the east. The lower legs and feet were not recovered. A copper alloy pin with ?fabric attached was recovered. Coffin remains included iron nails and decayed wood fragments. The fill contained a sherd of pottery and a tile fragment. Cut by 9, the cut for Burial 1. Male. Age at death, 18 or 19 years.

### Burial 4

Skeleton 4, Fill (15), Coffin (13), Cut 14. Supine, extended. Orientated north-east to south-west. Largely truncated by sewer trench. Extended beyond section to the east. Fragments of skull only in plan; part of legs and hands recovered from section. Coffin fittings included iron nails and a coffin handle. Sex not determined. Age unknown.



**Figure 3** *Burial 5*

### Burial 5 (*Figure 3*)

Skeleton 5, Fill (10), Coffin (11), Cut 12. Supine, extended. Orientated north-east to south-west. Truncated below pelvis by recent service trench to the west. Only the legs and some foot bones were recovered. Coffin remains included iron nails and decayed wood fragments. The fill contained a large sherd of pottery. Sex not determined. Age unknown.

Although the trench edges were largely obscured by shoring sheets, it was possible to see that the grave cuts for the burials were truncated by nineteenth and twentieth century pits and service trenches to a depth of at least 1.4 - 1.6m below the ground surface. Burials 1 - 4 were also disturbed, to a greater or lesser extent, by the initial excavation of the sewer trench.

## 5.0 DISCUSSION

A few sherds of post-medieval pottery, found in the back-fill of the graves, provide a *terminus post quem* for the burials at some point during the post-medieval period. Documentary evidence strongly suggests that the burials are, in fact, those of patients of Addenbrooke's Hospital during the years 1772-1778. During the early years of the hospital, a patient had to have a valid subscriber's recommendation in order to be admitted. If a dying patient had not been recommended by a parish, which would take responsibility, the recommending subscriber was asked to provide security for the burial fees, or to remove the patient. In the event that no one would take responsibility, the dead person would be buried in the churchyard of St Benet's at the Hospital's expense. The Hospital soon discovered that the number of patients for which it had to pay burial fees was larger than expected and so, in July 1771, the Bishop of Ely was asked to consecrate a piece of land at the rear of the Hospital. The Bishop decided that this was unnecessary as the Chapel of St Anne had formerly stood on the site. It was therefore ordered that all patients dying in the hospital should be buried in the grounds and that the porter should dig the graves.

The Hospital Rules were revised in 1778 so that the recommending subscriber had to take financial responsibility for burial (Rook *et al*, 1991). Thus, burials were probably only carried out for a period of eight years - while it is possible that burials could have continued after 1778, the implication is that the subscriber would have had to arrange for the removal of the body to an appropriate churchyard.

Given that Addenbrooke's was a hospital for the poor, it would be expected that any skeletal remains would bear signs of physiological stress during life. Skeleton 2 shows evidence of periods of starvation and/or feverish illness as well as indications that heavy loads were carried during growth. The latter indications were also present in Skeleton 3. Skeleton 5 displayed a raised area of new-bone growth on the right tibia. It is suggested (Appendix A) that it is an example of a 'tropical ulcer'; that is, an infection of the soft tissue which persists as a chronic sore. Such infections were, apparently, extremely common before the discovery of antibiotics.

Although the sides of the trench were largely obscured by shoring sheets, it was evident that nineteenth and twentieth century activity had completely removed the surface from which the burials were cut. In many places, later pitting extended below the level at which the surviving skeletons were found (all of which were disturbed to a greater or lesser extent). It is possible, then, that further remains still survive in the area, although they are likely to be considerably disturbed.

In the light of the present excavations, it seems probable that the human remains discovered during the construction of Peckover House in 1895 formed part of the hospital cemetery, and were not of medieval origin as was believed at the time.

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## ACKNOWLEDGEMENTS

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## APPENDIX A

### SKELETAL REMAINS

by Corinne Duhig

Ageing and sexing methods used are those from Steele and Bramblett (1988) and Ubelaker (1989). Stature is determined by the regression equations of Trotter and Gleser (1952).

#### Skeleton 1

These remains consist of a few skull fragments, five portions of the pelvis, both femora and patellae and some bones of the hands. They are probably those of a woman, as shown by the form of the eye orbits and mastoid processes (and perhaps the nuchal line) and the general gracility of the skeleton. None of the more-reliable ageing features are present, but the vault sutures are all open, so the woman was unlikely to have been more than 30 years of age when she died.

One femur could be measured, and the stature calculated from this is approximately 162.5 cm, or 5' 3 1/2".

#### Skeleton 2

This skeleton is almost complete in the upper part, but lacks the hands, one femur, the lower legs and feet. The intermediate state of fusion of the long-bone epiphyses at shoulder and knee and the fused state of those at the elbow indicate an age of between 14 and 18 years in females and 20 to 22 in males. It is not possible to determine the sex of immature skeletons, but the very wide sciatic notch and raised auricular area suggest that these are possibly the remains of a female. All but one of the teeth present at death were recovered, and the erupting third molars in the mandible and unerupted ones in the maxilla confirm this girl's age at death as approximately 16 years.

One molar tooth had been lost in life. Thirteen of the anterior teeth have linear and pitted defects in the enamel indicative of periods of severe physiological stress during growth, due to either starvation or feverish illness, or both. These defects are frequent in earlier populations, and are present at a low level even in modern English people, but it certainly is not surprising to find them in a girl likely to have been a pauper. She also had changes in her two lowest vertebrae, Schmorl's nodes, that are possibly due to the strain of carrying of heavy loads while her growing skeleton was vulnerable. The presence of an additional vertebra (the lowest thoracic) is a not-uncommon skeletal variant of no significance to health.

#### Skeleton 3

The whole body was recovered with the exception of the lower legs and feet. All the teeth were present except three from a broken area of jaw and a first molar, lost in life. The third molars are erupted but barely worn, which suggests an age of not much more than 18 years. All the epiphyses of shoulder, wrist and knee are fusing but those of the elbow are fused, as in skeleton 2, above. This combination of similar epiphyseal-fusion state with a slightly greater dental age than skeleton 2 suggests that

the individual was male, and all the features of the skull and pelvis used for sexing confirm this: this is the skeleton of a young man of 18 or 19 years.

Just coming to the cessation of his growth, he was already 182 cm tall (5' 11 1/2"). Schmorl's nodes are present on his vertebrae as on those of skeleton 2: they are less severe but more widespread.

#### Skeleton 4

Only a few fragments were recovered of this individual: several skull pieces, a distal radius, some hand bones, four pieces of pelvis and both femora and patellae. The remains are those of an adult, but there are only three areas of skull and pelvis present which can aid in determining sex and they are contradictory, and the femora are of a size appropriate for either sex.

#### Skeleton 5

The legs and feet of this adult skeleton are the only parts preserved, and few of the foot bones are present. Sex cannot be determined.

On the right tibia, about two-thirds of the way down the lateral aspect of the shaft, is a solid, raised area of new-bone formation, about 7 cm long and 3 cm at its maximum width, with a smooth-sided central cavity. The new bone represents an inflammatory response, and in this case it is well-organised — bone tends to 'reorganise' itself with time to its normal condition of density and contour. I suggest that this is an example of what is often called a 'tropical ulcer': an infection of the soft tissue of the lower leg or ankle, which does not heal but persists as a chronic sore, periodically or continually discharging pus and provoking a response from the underlying bone (Ortner & Putschar 1985). In pre-antibiotic times these ulcers would have been common, apparently one of the commonest disorders which Victorian doctors had to treat (Manchester pers. comm.), although this is the first I have seen of any historic or prehistoric period from Cambridgeshire.



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