

## Roman York skeleton could be early TB victim

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The skeleton of a man discovered by archaeologists in a shallow grave on the site of the University of York's campus expansion could be that of one of Britain's earliest victims of tuberculosis. Radiocarbon dating suggests that the man died in the fourth century. He was interred in a shallow scoop in a flexed position, on his left side.

The man, aged 26-35 years, suffered from iron deficiency anaemia during childhood and at 162 centimetres (5ft 4in), was a shorter height than average for Roman males.

The first known case of TB in Britain is from the Iron Age (300 BC) but cases in the Roman period are fairly rare, and largely confined to the southern half of England. TB is most frequent from the 12th century AD in England when people were living in urban environments. So the skeleton may provide crucial evidence for the origin and development of the disease in this country.

The remains were discovered during archaeological investigations on the site of the University's £500 million expansion at Heslington East. Archaeologists unearthed the skeleton close to the perimeter of the remains of a late-Roman masonry building discovered on the site, close to the route of an old Roman road between York and Barton-on-Humber.

The burial site is on part of the campus that will not be built on. The University is developing plans for community archaeology and education



visits once the investigations are complete.

Detailed analysis of the skeleton by Malin Holst, of York Osteoarchaeology Ltd, revealed that a likely cause of death was tuberculosis which affected the man's spine and pelvis. She says that it is possible that he contracted the disease as a child from infected meat or milk from cattle, but equally the infection could have been inhaled into the lungs. The disease then lay dormant until adulthood when the secondary phase of the disease took its toll.

Heslington East Fieldwork Officer Cath Neal, of the University's Department of Archaeology, said: "This was a remarkable find and detailed study of this skeleton will provide us with important clues about the emergence of tuberculosis in late-Roman Britain, but also information about what life was like in York more than 1,500 years ago.

"A burial such as this, close to living quarters, is unusual for this period when most burials were in formal cemeteries. It is possible that the man was buried here because the tuberculosis infection was so rare at the time, and people were reluctant to transport the body any distance."

Malin Holst added: "There were signs of muscular trauma and strong muscle attachments indicating that the individual undertook repeated physical activity while he was in good health. There was some intensive wear and chipping on his front teeth which may have been the result of repeated or habitual activity. There was evidence for infection of the bone in both lower limbs but this appeared to be healing at death."

Investigation of the remains is continuing -- Professor Charlotte Roberts, of Durham University, with Professor Terry Brown at Manchester University, is now studying DNA from the skeleton as part of National Environmental Research Council funded research into the origin, evolution and spread of the bacteria that causes TB in Britain and parts



of Europe.

Source: University of York

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