

## **A CASE OF LANGERHANS' CELL HISTIOCYTOSIS AND TUBERCULOSIS OF AN INFANT FROM THE 18<sup>th</sup> CENTURY HUNGARY**

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Langerhans' cell histiocytosis, also referred to as Histiocytosis-X, is a spectrum of disorders characterised by over-proliferation and accumulation as lesions of 'histiocytes'. The etiology and pathogenesis of histiocytosis are still unknown.

A 1.5-2.5 year-old-child – one of the bodies of the 263 individuals buried in the Dominican Church crypt in Vác, Hungary – displayed numerous bony lesions present throughout the skeleton. They appear punched out lytic lesions, with no apparent reactive changes at the edges. The likely date of the burial is approximately 1750-1770.

The ribs contain lesions showing evidence of pure osteolytic effects with no evidence of any attempt at healing. Petrous temporal bone and pelvic bone show the bone with typical destructive and multiple lytic lesions, varying in size between 3-8 mm. One rib was tested for the presence of *M. tuberculosis* DNA, and the samples from the visceral surface of the rib were positive.

The case is more within the normally accepted age group for a case of Langerhans cell histiocytosis, and this is our considered final diagnosis<sup>1</sup>. In view of this diagnosis the finding of tuberculosis is not surprising. This child would have a repressed immune system, due to marrow replacement by the malignant cells, and thus be vulnerable to tuberculosis, which was widespread in this community.

The support of the Hungarian Scientific Research Fund (OTKA) No. 61155 is greatly acknowledged.

<sup>1</sup> Spigelman M, Pap I, Donoghue HD. A death from childhood cancer and tuberculosis in 18th Century Hungary - what palaeopathology can tell us today. *Leukemia* 20, 740-742, 2006.