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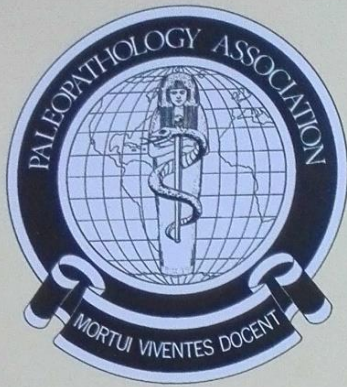
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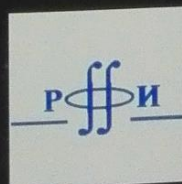
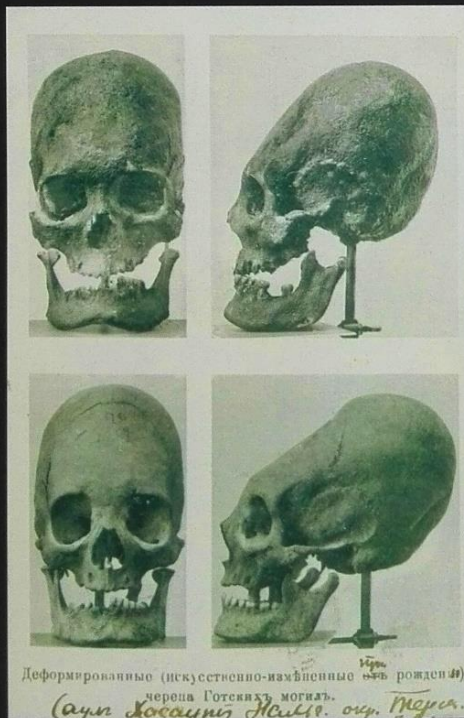
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Moscow, Russia

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THE 21ST EUROPEAN MEETING OF THE PALEOPATHOLOGY ASSOCIATION





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PALEOPATHOLOGICAL AND METAGENOMIC STUDY OF A XITH CENTURY PERUVIAN MUMMY: AN ANCIENT CASE OF CHAGAS' DISEASE

A complete autopsy of a natural mummy of a pre-Columbian Andean female from Cuzco (Peru) was performed. The stomach was evidently ectasic and the oesophagus seemed to be very enlarged. The heart revealing a severe cardiomegaly. A large amount of faeces was present in the colon, which looked exceptionally distended. The oesophageal and cardiac tissues were previously stained with Giemsa, showing oval formations of about 1–2 mm. Electron microscopy showed clusters of rare, irregularly oval formations of a maximum diameter of 1 mm. Microscopic anatomy of sections of the heart was found to be markedly altered by *T. cruzi*. The colic wall, with fibrous structures and areas full of faecal material and colonies of amastigotes of *T. cruzi* were also observed; therefore, it was concluded that the mummy was a case of Chagas' disease in its chronic phase, confirmed by metagenome analyses.