

Forensic Paleoradiology: Identification of a public figure murdered in 1837.

Castro M1, Díaz J, Riquelme JL, Rivas P, Richter P.

Abstract

Two unidentified graves were found during construction of a new crypt at the Metropolitan Cathedral in Santiago, Chile. One of the bodies was sent to the Teaching Hospital of the University of Chile for forensic identification. The fully mummified corpse was suspected to be that of Diego Portales, a prominent Chilean politician who was assassinated in 1837. The condition of the corpse determined that the best way to establish a positive identification was by means of a multislice CT scan, since the body had been autopsied and embalmed using unknown substances. This paper presents the results of the virtual autopsy of the remains and compares these results with the original autopsy report of 1837. The embalming method is also discussed, based on chemical analysis using inductively coupled mass spectroscopy (ICP-MS) and cold vapour atomic absorption spectrometry (HG-CVAAS).