

---

**Visual Abstracts about Radiology and the Past: Secrets unveiled / Abstractos Visuais sobre Radiologia e o Passado: Segredos desvendados**

**“World first “Myelography” (2.500 years ago) and... a diagnosis”**

*“Primeira “Mielografia” do mundo (há 2.500 anos) e... um diagnóstico”*

**Carlos Prates<sup>1,2</sup>, Sandra Sousa<sup>1,3</sup>**

---

<sup>1</sup>Secção de Paleorradiologia e A.N.D por Raios X da SPRMN, Lisboa, Portugal

<sup>2</sup>IMI/Affidea, Portugal

<sup>3</sup>Hospital dos Lusíadas, Lisboa, Portugal

**Received:** 23/03/2024

**Accepted:** 04/04/2024

**Published:** 30/04/2024

© Author(s) (or their employer(s)) and ARP 2024. Re-use permitted under CC BY-NC. No commercial re-use.

# VISUAL ABSTRACTS about RADIOLOGY and the PAST: secrets unveiled

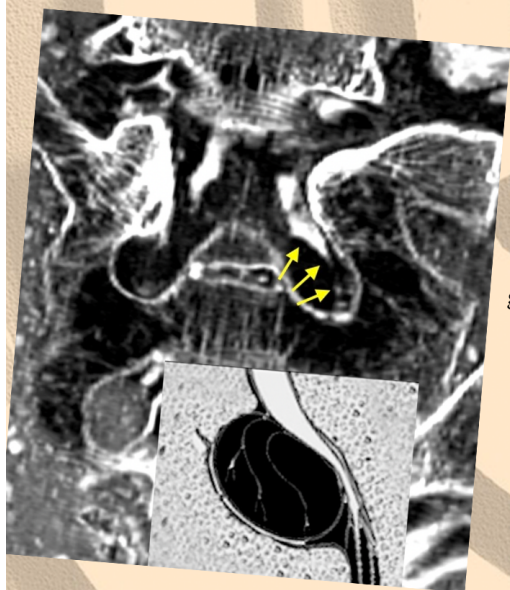
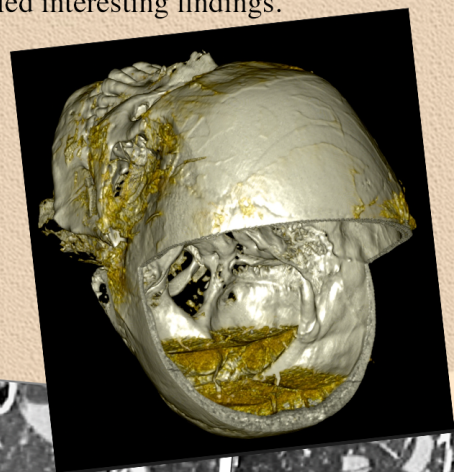
SPRMN — Section of Paleoradiology e N.D.T. by X-Rays (case n° 1)

## World first “Myelography” (2.500 years ago) and... a diagnosis

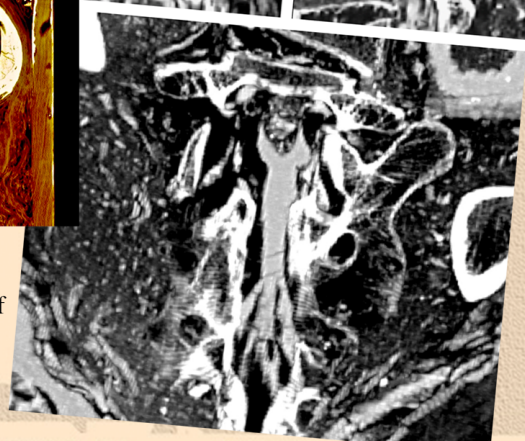
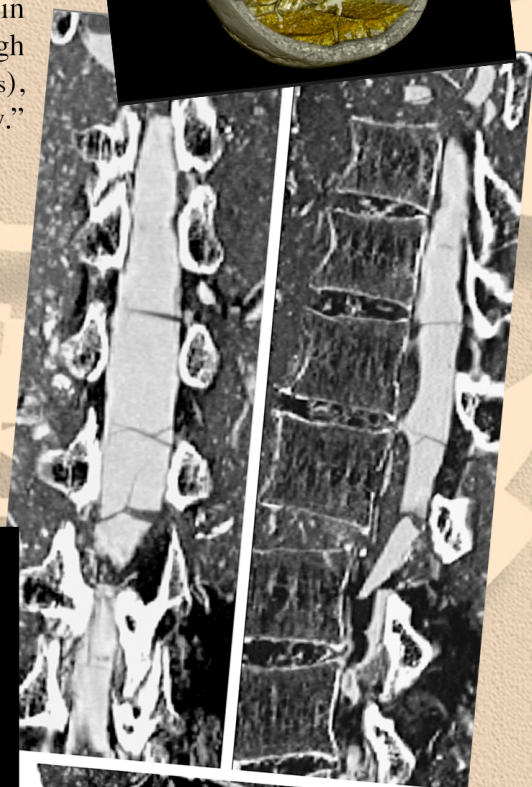


**Pabasa** (left: coffin depiction + 3D CT view) was a Late-Period Egyptian male mummy who died at an estimated age of 40-50 and worked as a priest of the fertility god Min. He is part of the Egyptian collection of the Museu Nacional de Arqueologia (M.N.A.) of Lisbon, which was studied by MDCT (Lisbon Mummy Project) and revealed interesting findings.

In ancient Egypt, mummification involved removing the brain and replacing it in the skull with a liquid substance made of resin that would solidify when cooled. During this process in Pabasa, a significant amount of resin (right) drained through the foramen magnum into the spine (right: frontal + sagittal views), creating what is believed to be the first known “myelography.”



Moreover, this event leads to a diagnosis: A left first sacral root extrinsic compression due to a highly probable Tarlov cyst (left: arrows + graphic drawing).



Myelography was first described by Sicard and Forestier in 1921 and soon became an established technique. A contrast agent was applied by intrathecal injection, first Lipiodol and later Pantopaque.

For decades, it was the only diagnostic method that depicted spine soft-tissue pathologies in the spinal canal, either extra-dural (disc herniation, hemorrhage, tumor) or intramedullary (tumor). It also showed nerve root compressions, none visible on conventional X-rays. Later, C.T. and M.R.I. made myelography obsolete.



We will never know if Pabasa had any left groin or leg discomfort, but this was one of his peculiar findings worth sharing.