

Cat. 11 Mummy of Harerem

IMPACT ID: IMP00104

Institution: Leiden University

Designation: 11

Date of Acquisition: 1828

Contact: Dr. Maarten Raven (r.rave@rmo.ml)

Image Modality: CT

Country: Egypt

Site: Thebes

Time Period: Late Period

Dynasty: Late 25th Dynasty to early 26th Dynasty

Date: 700-650 BC

Sex: Male

Age: 45-55

Background:

The Mummy of Harerem was purchased in 1828 from G. d'Anastasi, associated with the mummy itself, was one wooden coffin, which had been painted and had "Harerem" inscribed on it (Raven et al., 2005). Based on the coffin's design, the authors have dated the mummy to the late 25th dynasty, to the early 26th dynasty (Raven et al., 2005). There are some features that made the author question if the mummy belonged to the third intermediate period, however, due to the lack of subcutaneous filling, the mummy is most likely not from the third intermediate period (Raven et al., 2005). Lying on top of the mummy is a rectangular bead net, it stretches all the way from the sternum to the thighs, that being said, the authors note that the net was most likely larger (Raven et al., 2005). In addition to the net, four figures of the Sons of Horus lay on top of the net. They all have white faces, black wings, and bodies that have strips of white, blue, and red (Raven et al., 2005). These figures, "have been made in mosaic of small ring beads

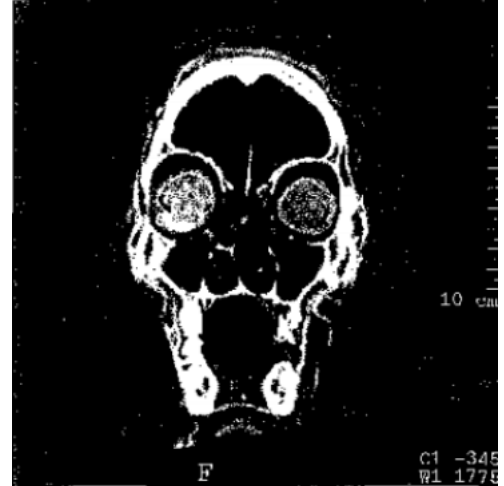


Figure 1.0 Image of the mummy of Harerem's face (Raven et al., 2005).

(Raven et al., 2009). Resin appears directly on Harerem's skin, and also in small amounts within the wrappings themselves (Raven et al., 2005).

Pathological features:

The skull is described as being intact, with the sutures being "faintly" visible (Raven et al., 2005). In addition, the external protuberance was noted to be jutting out (Raven et al., 2005). The authors note that brain removal occurred through the left nostril, however, on the right side, the lamina cribrosa has a defect, and small bone fragments are observed in the ethmoid region (Raven et al., 2005). The only thing that remains inside the skull itself is dural remains (falx cerebri and tentorium cerebelli) (Raven et al., 2005). The skin covering the orbits was coated in resin, and the orbits themselves had been filled with rolls of linen, with artificial eyes lying on the ventral side (Raven et al., 2005). The oropharynx has been crammed with a medium-dense material, which had also been coated in resin (Raven et al., 2005). Upon analysis, the authors were able to conclude that Harerem most likely had an overbite, they had severe attrition, periodontitis, and several periapical lucencies were observed (Raven et al., 2005).

The spine appears to have a normal alignment, that being said, at the sacral level there is a slight lordotic kink, this is the result of a dislocation (Raven et al., 2005). Within the cervical and thoracic region, the authors describe some "disorganization" among the vertebral bodies, this is consistent with, "the postmortal fractures of the cranial thoracic ribs" (Raven et al., 2005; 125). Spondylosis is observed within the following areas, "the middle and lower thoracic level and in the thoracic-lumbar transition zone, with bridging osteophytes" (Raven et al., 2005; 126). Within the lumbar region, sclerosis of the intervertebral joint is well observed, along with dense discs. Finally, within the pelvis, the authors note post-mortem dislocations of the sacro-iliac joints and the pubic symphysis (Raven et al., 2005).

Raven et al., describe multiple post-traumatic features within the thoracic cage, including but not limited to, rib fractures, and costovertebral dislocations on the lower left side (Raven et al., 2005). Furthermore, osteophytes located on the right acromio-clavicular joint were observed, this is noted as a degenerative change (Raven et al., 2005). Tubular structures were noted in several regions of the thorax including "the cranial part of the trachea, the heart, and the great vessels (the carotids on both sides, the left subclavian artery, and the descending aorta down to the bifurcation)" (Raven et al., 2005; 126). The mummy itself has been filled irregularly with a low-density, homogenous material (sand or mud) (Raven et al., 2005). The filling is found mainly on the right side as opposed to the left, and the upper cavities appear to be empty (Raven et al., 2005). The embalment incision is located on the lower left abdominal wall, the authors note that within this incision, there are extra rolls of linen (Raven et al., 2005). Finally, no packages or internal organs were observed within the body itself (Raven et al., 2005).

We will conclude our report of Harerem's pathological features with a discussion of the upper and lower extremities. The upper extremities have normal density, correct alignment, and a healthy ratio of cortical to spongy bone (Raven et al., 2005). That being said, on the right hand, there appears to be dislocations of the middle row of the hand bones; the authors state that this was most likely acquired post-mortally (Raven et al., 2005). The lower extremities on the other hand, "show extensive post mortal articular damage" (Raven et al., 2005; 126). The right patella is positioned between the upper legs, and "15 cm distally to the knee joints", while the left patella is situated "medially to the femoral-tibial joint" (Raven et al., 2005; 126). The right and left patella dislocations also caused a partial dislocation of the femoral-tibial joints (Raven et

al., 2005). In addition, both ankle joints appear to be dislocated (Raven et al., 2005). The ratio between the spongy bone and cortical bone is normal within the lower extremities, however, growth arrest lines are visible on the distal tibia. Finally, through the analysis of the CT slices, the authors were able to conclude the significant calcification of the tibial and femoral arteries, which could be an indication of diabetes (Raven et al., 2005).

Resources

Raven, M. J., Taconis, W. K., & Maat, G. J. 2005. Egyptian mummies: Radiological Atlas of the Collections in the National Museum of Antiquities at Leiden. Turnhout, Belgium: Brepols.