Theban Male

Impact ID: IMP00011

Institution: Redpath Museum

Designation: RM2718

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Image Modality: CT

Country: Egypt

Dig Site: Thebes

Time Period: Ptolemaic

Date: 350-60 BC

Sex: Male

Age: 20-30 years



Figure 1. 3D Reconstruction of Dentition of Theban Male (Wade et al., 2012)



Figure 2. Theban Male at Montréal Neuro Institute (Wade et al., 2012)

Background:

The Redpath Museum acquired two Theban mummies, one male and one female, from James Ferrier in the mid-nineteenth century from Egypt (Lawson, 2016). The museum also acquired several animal mummies with the Theban mummies. All these mummies came from James Ferrier, the fourth mayor of Montreal (Lawson, 2016; Wade et al., 2011). James Ferrier is believed to have most likely acquired the Theban mummies on February 19th, 1859 from Mustapha Agha Ayat, a key person in the illegal antiquities market (Lawson, 2016). In 1858 the Egyptian Antiquities Service was formed in an attempt to halt the antiquities market by always having an inspector on site of excavation and all antiquities being offered to the new Egyptian Museum before the excavator can lay claim (Lawson, 2016). However, traders of illegal antiquities usually operated with little trouble throughout the nineteenth and early twentieth centuries due to poor excavation of sites (Lawson, 2016). Ferrier's Theban mummies would have most likely been supplied by a local dealer, and since the trade was illegal and documentation poor, it is impossible to trace exactly (Lawson, 2016). On the September 26, 1859, James Ferrier Jr. presented a list of Egyptian artifacts to the Natural History Society of Montreal (NHSM) and the donation was accepted giving James Ferrier Sr. life membership to the society (Lawson, 2016; Wade et al., 2011). At an ordinary meeting of NHSM on October 31, 1859, a paper was

read called "Further results of Examination of the Mummies in the Ferrier Collection" (Lawson, 2016). More detail was provided on the female Theban mummy, possibly due to the highly decorated coffin and high status of the individual that is implied as a result (Lawson, 2016).

For the next 65 years there is very little documentation, but there are some surviving exhibit texts that date to 1896 (Lawson, 2016). The exhibit label for RM2718 states poor people of low rank were embalmed in the way the man was, without a coffin (Lawson, 2016). In 1987, there is brief mention of the Ferrier collection being on display, but no specific mention of the Theban mummies being on display (Lawson, 2016). A photo labelled "Exhibition Hall, Natural History Society Museum, Montreal, QV, ca. 1900" shows the female Theban mummy on display with the what appears to be the Theban male in a similar display case behind, but it is hard to see (Lawson, 2016). Due to emphasis and local flora and fauna and economic slump during this time, the Egyptian collection was getting little attention (Lawson, 2016). In 1906, the Natural History Society's collections were packed up in anticipation of construction of a new facility (Lawson, 1906). However, lack of funds, outbreak of war, and further debt led to the downfall of the organization and all the collections being transferred to McGill University in 1925 (Lawson, 2016). Transfer and organization of the NHSM collections is unclear, but the mummies were officially on display in the new Ethnological Museum by October 1928 (Lawson, 2016). X-rays were carried out in 1928, and although there are no surviving written reports of the findings, glass lantern slides have been found that visually show the radiographic efforts of this time (Lawson, 2016). Some undated x-ray descriptions also related back to these examinations (Lawson, 2016). The space of the museum was required for physiotherapy during war years, resulting in the artifacts being placed ins semi-storage (Lawson, 2016). The Ethnological Museum open briefly in 1947, but closed permanently in 1949, when it amalgamated with the Ethnology Division of the Redpath Museum, sending the Egyptian collection to Divinity Hall (Lawson, 2016).

In 1969, Divinity Hall had planned renovations to the building and the Egyptian collection was removed and sent to storage in the University-owned museum (Lawson, 2016). However, this museum did not last long as financial problems near the end of 1970 caused McGill University to close the museum to the public (Lawson, 2016). Until 1987 the collections in the museum were only accessible to the University community and researchers by appointment (Lawson, 2016). The Theban male mummy made brief appearances in the summer of 1980 and 1981 at the *Man and His World* exhibit (Lawson, 2016). At this exhibit he was a spectacle not for his high status and embalming practice, but for the fact he was poor man buried "as is" in the hot sand (Lawson, 2016).

In 1994, Redpath Museum was approached by McCord Museum for a loan of one of the x-rayed mummies for an exhibit celebrating the one-hundred-year anniversary of the discovery of x-rays (Lawson, 2016). Instead, Redpath used the newest radiological technology to perform new scans on the Theban Male, who was sitting in storage at the time (Lawson, 2016). Before being sent to the Hôpital Saint-Luc for scanning, the mummy was given to the McCord textile conservator to remove dust, secure lose wrappings, and prepare the mummy for future transport (Lawson, 2016). The radiological examination took place on January 21, 1995 and was

supervised by Dr. Ètienne Cardinal and Patrick Horne acted as paleopathology supervisor to analyze the examination (Lawson, 2016; Wade et al., 2011). Horne named the mummy "RED II" to stick with the naming protocol used for mummy examinations (Lawson, 2016; Wade et al., 2011). The new exhibit, *The Inside Story*, examined the history of x-rays with one of the highlights of the exhibits being the high-tech scans of "Red II" shown through an interactive computer (Lawson, 2016). This exhibit was at McCord May-November of 1995 and then moved to the Museum of Science and Technology in Ottawa between June 1996-April 1997 (Lawson, 2016).

During the winter of 1997, the Theban Male and scans, x-rays, and interactive display were installed on the third floor of the Redpath museum with the other two mummies (Lawson, 2016). This was the start of the Ethnology gallery, now called the World Cultures gallery, opened in December 2004 (Lawson, 2016). In 2005, the interactive display was updated to be more user friendly and exciting for visitors with the helps of a M.Sc. Computer Science student at McGill (Lawson, 2016).

This mummy was likely an elite after thoroughly examining the mummification process (Wade et al., 2011). With the heart remaining in situ and canopic jars possibly containing his desiccated organs returned to his body, these are all signs of elite mummification techniques of the New Kingdom, which the new radiocarbon dating places him in (Wade et al., 2011). However, the limbs not being individually wrapped, or even separated from the body, shows a less involved mummification, which is not that of an elite (Wade et al., 2011).

In April 2011, the Theban Male was scanned again with the other two mummies in Redpath's collection, so the newest technology could be used to add to the IMPACT database by Dr. Andrew Nelson (CTV News Montreal, 2011; Lawson, 2016; Wade et al., 2011). These scans were carried out at the Montreal Neurological Institute (MNI) and were aimed to confirm osteobiographical details, state of preservation, dental and overall health, and specifically the dental filling in the Theban Male (CTV News Montreal, 2011; Lawson, 2016; Wade et al; 2011).

Using the new, high resolution 3D scans performed on the three mummies in 2011, a facial reconstruction project began in 2012 and was completed in 2013 (Lawson, 2016). Andrew Wade and Andrew Nelson processed cranial and mandibular CT data, removing all wrapping and tissues from the skulls (Lawson, 2016). The skull was then 3D printed so Victoria Lywood, a forensic artist, could place tissue markers and complete the reconstruction (Lawson, 2016). The facial reconstructions are now on permanent display inn the Redpath's World Cultures gallery, the same gallery in which the mummies are displayed (Lawson, 2016).

Pathological Features:

The initial report of this mummy from the 1859 examination gave the Theban Male very little attention compared to the female. RM 2718, the male mummy, was described as having no case and being wrapped in many folds of linen saturated with resin with the outer bandages being painted a dull red (Lawson, 2016). During the 1859 examination only the head was unwrapped

(Lawson, 2016; Wade et al., 2011). The head is in good preservation, not covered in spices, but it appears to have bitumen poured and partially covering the face (Lawson, 2016; Wade et al., 2011). The eyes were said to be extracted with the lids moulded to preserve the natural shape (Lawson, 2016). Straight brown hair was also preserved quite well on the head, which appears to resemble European hair (Lawson, 2016). The profile of the face looks like a Greek head, or that of a monument for an Egyptian priest (Lawson, 2016). There is also two clear surgical incisions on its chest cavity, but these are not mentioned in the initial reports for unknown reasons (Lawson, 2016).

The initial x-ray examination of RM2718 do not include a lot of details on what was seen. What is noted is that the mummy is of an adult with several healed rib fractures from during life (Lawson, 2016). A dark mass is noted on one side of the x-ray and is explained as being a papyrus roll, which are said to always be found in Egyptian mummies (Lawson, 2016). The age and sex of the mummy are not noted.

The x-ray examinations at Hôpital Saint-Luc found the mummy to be an adult male aged 30-35 years old and would have been 1.56m tall in life (Horne & Cardinal, 1995; Lawson, 2016; Wade et al., 2012). He lacked any major skeletal abnormalities, but his ethmoid bone was broken on the left side, indicating excerebration through the left nostril (Horne & Cardinal, 1995; Lawson, 2016). However, there is severe dental attrition and periodontal abscesses, typical of Egyptian mummies (Horne & Cardinal, 1995; Lawson, 2016). A small rounded mass embedded in the largest dental cavity may have been placed as an intervention to help relieve pain (Horne & Cardinal, 1995; Lawson, 2016). There was some post-mortem trauma to the upper neck vertebrae and the 19th century surgical interventions in the dorsal area, but the mummy appears in good condition otherwise (Horne & Cardinal, 1995; Lawson, 2016). There were no canopic jars found with the mummy either (Horne & Cardinal, 1995; Lawson, 2016).

The MNI examinations of 2011 concluded this mummy is of a short, possibly elite, young adult male in his early twenties (Lawson, 2016; Wade et al., 2011). The narrow subpubic angle and presence of a penis confirms male being the sex (Wade et al., 2011). All his epiphyses were fused, but there are still noticeable growth plate regions on the bones (Wade et al., 2016). Sacral vertebrae were not completely fused (Wade et al., 2011). Pubic symphysis appears billowing and ridged with the slight beginning of a plateau (Wade et al., 2011). Third molars have all erupted fully (Wade et al., 2011). All these signs indicate an adult aged 20-30, with the unfused sacrum indicating it to be in the earlier 20s (Wade et al., 2011). Slight Harris Lines are evident in the tibiae, indicating interrupted growth in childhood (Wade et al., 2011).

The dental health varies across the mouth but is poor in general with a packing in one of the left molars to protect exposed nerves (Lawson, 2016; Wade et al., 2011; Wade et al., 2012a; Wade et al., 2012b). Mandibular dentition only shows slight wear (Wade et al., 2011). Across maxillary dentition there is evidence of multiple dental abscesses the roots of incisors and molars (Wade et al., 2011; Wade et al., 2012a; Wade et al., 2012b). There are caries evident in the maxillary right second premolar and first molar and the left first and second molars (Wade et al., 2011; Wade et al., 2012a; Wade et al., 2012b). The maxillary dentition is also missing the right first molar and left second molar, likely due to hypodontia (Wade et al., 2011; Wade et al.,

2012b). As mentioned in the previous study, there is a low-density material packing the left caries in an attempt to treat the exposed nerves (Wade et al., 2011; Wade et al, 2012a; Wade et al, 2012b). There is no previous mention of dental interventions during this time, but it is not likely added post mortem as the embalmer replaced body parts in their original shape, which this is not, and other caries are left unpacked, instead of all being filled by the embalmer (Wade et al, 2012a; Wade et al., 2012b).

Damage to the left side of the ethmoid bone confirms the brain was removed through the left nostril, but the eyes were left intact (Lawson, 2016; Wade et al., 2011). There is a vertical incision on the left side of the abdomen where evisceration would have been carried out for the stomach, intestines, liver, and bladder, leaving the thoracic cavity intact (Lawson, 2016; Wade et al., 2011). There is presence of an anal tampon (Lawson, 2016). No limbs were wrapped separately and the body was wrapped in three layers of linen, each with a layer of resin or plaster between them (Lawson, 2016; Wade et al., 2011). Arms are extended with the palms facing down on the thighs (Lawson, 2016). Radiocarbon dating was performed on a linen sample in 2012 dating this mummy to the Ptolemaic Period (332-30 BC) (Lawson, 2016; Wade et al, 2011).

The dental state varies form poor to good depending on the region of the mouth. The maxillary dentition is in rather poor state with numerous caries and abscesses (Wade et al., 2012a; Wade et al., 2012b). There are caries in the maxillary right second premolar and first molar and in the left first molar and second molar (Wade et al, 2012a; Wade et a., 2012b). The mandibular dentition is in good condition and only exhibits normal wear patterns (Wade et al., 2012a; Wade et al., 2012b). There are two dental fillings on the left, maxillary first and second molars, the filling is made of a low-density material (Wade et al., 2012a; Wade et al., 2012b). There is also labial wear on the left first and right second maxillary incisors (Wade et al., 2012; Wade et al., 2012b). This wear pattern is speculated to be from the maxillary incisors being used as tools, but no reason has been confirmed (Wade et al., 2012a; Wade et al., 2012b). A possibility as to why the maxillary teeth are so deteriorated compared to mandibular is if the money was consuming soft, sticky foodstuff that does not require chewing (Wade et al., 2012a; Wade et al., 2012b). Honey was available to the wealthy in ancient Egypt and if held to the roof of the mouth and left in contact with the front teeth it could cause this decay (Wade et al., 2012a; Wade et al., 2012b). A possible explanation of the labial damage to the maxillary incisors is if the foodstuff was contaminated with windblown sand and was delivered to and from the mouth by a specialized tool in an upward and outward movement (Wade et al., 2012a; Wade et al., 2012b).

References

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