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THE PEOPLE OF DEIR EL-MEDINEH: A PRELIMINARY PALEOPATHOLOGY STUDY

ABSTRACT: The New Kingdom worker's village at Deir el-Medineh on the West Bank of Thebes is one of the most important archaeological sites from ancient Egypt. The village, its religious chapels, and nearby cemeteries have all been excavated, and have yielded vast amounts of artifacts and written documents. This material has been widely published and studied, but what has been virtually ignored are the human remains of these people. Only a handful of the mummies from Deir el-Medineh have been studied, the most recognized, those of the couple Kha and Merit in the Turin Museum, have both been X-rayed and CT-scanned. The knowledge about diet, diseases, family relationships, physical activities and life span that that could be learned from the mummies of Deir el-Medineh, have the potential to complete our understanding of this ancient community.

KEYWORDS: Egypt – Deir el-Medineh – Mummies – Paleopathology

Egyptologists know more about the New Kingdom (Dynasties 18–20) worker's village of Deir el-Medineh on the West Bank of Thebes than any other community from ancient Egypt. We not only have the houses that they lived in, and the chapels where they worshipped, but also the tombs in which they were buried. The vast amount of written material found at this site allows us to construct family genealogies, understand the operation of a work crew, discuss the functioning of the oracle, view a local law court in action, and see into their personal lives in terms of marriage, divorce, inheritance, disputes, bartering, personal religious beliefs, as well as other aspects of ancient Egyptian daily life. So much of what Egyptologists know about the New Kingdom is based on the site of Deir el-Medineh.

What is odd, however, is how little we know about the actual people of Deir el-Medineh from their physical remains. Where are the mummies Bruyère and others discovered in the tombs at Deir el-Medineh? Very few are in museum collections, and even fewer have ever been studied. For example, the family tomb of the workman Sen-nedjem was found untouched in 1886. The tomb's decoration makes it undoubtedly one of the most beautiful

tombs on the Theban West Bank. Sen-nedjem's house lies nearby in the southwest corner of the village, and we can walk through the rooms where his family once lived, and from the tomb we have the furniture that they once used. But, what do we actually know about the man himself? How long did he live? Did he suffer from any diseases? What was his diet like? Does the condition of his skeleton give us any clues as to what role he had in the work crew? Sen-nedjem's mummy is in the collection of the Cairo Museum, but has never been X-rayed or CT scanned. The same is true of other Deir-el-Medineh mummies. Egyptologists know and publish so much about Deir el-Medineh, but the actual physical remains of that village's population are largely unstudied.

Maspero, accompanied by Eduardo Toda, the Spanish Consul-General, and several others entered Sen-nedjem's tomb in 1886, and it is based on Toda's written description of the state of the tomb that we know about the total number of mummies and who they belonged to (Toda 1887: 106–107). The mummies of twenty people were found inside the burial chamber, nine in coffins, and eleven simply lying on the floor. Most of the objects from the tomb were taken to Cairo and put into the museum that was then located in

Bulaq. The mummy of Sen-nedjem is in the Cairo Museum, presumably in his coffin (JE 27308).

Also in Cairo is the mummy of Isis, the wife of Sen-nedjem's son, Khabekhnet. In the official catalogue of the museum, Isis is described as being in her coffin (JE 27309), "wrapped in a mat of reeds" (Saleh, Sourouzian, 1987: 218). A preliminary report of the Egyptian Mummy Project published a photograph of an open coffin with a mummy inside, wrapped in a reed mat, saying "the opened coffin of Sennedjem from TT1", and then the caption for a second photograph with the mummy unwrapped stated: "when the mummy was revealed, it proved to be that of a woman, perhaps Sennedjem's wife or daughter-in-law" (Hawass 2004–05: 34). The SR number shown in the first photograph is not Sen-nedjem's, and clearly the mummy is that of Isis. Germer and Näser (2007: 95) also pointed out this mistake.

The mummy of Sen-nedjem's wife, Ii-Neferti, went to the Metropolitan Museum in May of 1886, along with twenty-eight other objects. Her mummy was unwrapped, and then transferred to the Peabody Museum, in Cambridge, MA, where Dr. Hooten performed an autopsy in 1933. The description of the mummy of Ii-Neferti (N/847 #6 MMA Acc. No. 86.1.6 A) is as follows:

"Skull of aged individual with cranial sutures obliterated and old age depressions in parietal regions. All teeth lost and alveolar processes absorbed. All bones show indications of advanced age, 75 years or more. Vertebrae shows collapse due to atrophic arthritis. Healed Colles' fracture of rt.radius. Female."

Based on the prayer to the god Thoth to be merciful, because he caused her to see darkness by day, which is inscribed on Bankes Stela #6 (Černý 1958), it is possible that Ii-neferti was blind, but that depends on how literally the meaning of the phrase "seeing darkness by day" should be taken. Mahmud (1999) presents a study of this stela, and considers the expressions the ancient Egyptians used for blindness.

The coffin and mummy of Khonsu, one of Sen-nedjem's sons, also went to the Metropolitan Museum, and his mummy was unwrapped and transferred to the Peabody Museum as well. Dr. Hooten also performed the autopsy on Khonsu (N/846 #7 MMA acc. No. 86.1.2 C), and his comments are as follows:

"Skull is that of a dolichocephalic male probably about 50 years of age. The teeth are well worn and most of the upper teeth have been lost but sutural obliteration is by no means complete. Phase of the pelvis is about 9. The vertebral column shows marked arthritic exostoses. On the basis of the condition of the long bones the age of the individual at death would probably be put at nearly 60 years."

The mummy of Khonsu's wife Tamaket, in her sarcophagus, originally went to Cairo, but then was bought by the Berlin Museum in 1889. In the Second World War, the coffin, presumably with the mummy still inside, was transferred to Sophienhof Castle in Mecklenburg, which was bombed and burned in 1945 (Germer, Näser 2007: 105).

Toda stated that the eleven mummies on the floor were fragile and poorly preserved, and so only the heads were kept in the interest of "ethnography" (Toda 1887: 106). There is a skull in the collection of the Biblioteca-Museu Victor Balaguer (inventory no. 3978) donated by Toda that came from the tomb of Sen-nedjem (González y Arema 2000). The skull is that of a female of about thirty years of age, but the lower mandible seems to have come from another skeleton, which was male, and added at some point after the skull was found. González y Arema suggests that the skull belongs to either Neferirut, one of Sen-nedjem's daughters, or Hetepet, either a daughter or a granddaughter (González y Arema 2000: 216).

The most famous mummies from Deir el-Medineh are certainly the husband and wife, Kha and Merit, in the collection of the Turin Museum, Italy. Ernesto Schiaparelli (1927) discovered their intact tomb in the course of excavations he carried out from 1903–06. The mummies of Kha and Merit were examined by X-rays (Curto, Mancinci 1968 – Pls. XII and XIII. the only comments are about the objects on the mummies, not the mummies themselves, Curto *et al.* 1980, Delorenzi, Grilletto 1989: 32–35, pls. XV–XVI), and then both mummies were CT-scanned in 2002 (Marochetti *et al.* 2005, Martina *et al.* 2005, Cesarani *et al.* 2009).

The mummy of Kha is that of an older male of about 60 years of age, who seems to have been overweight. There is a "wide space occupied by air between the body and the bandages around the chest and abdomen", and this space may have been produced by a "late reabsorption of fatty tissues" (Martina *et al.* 2005: 43–44). Kha also probably suffered from heart disease, as "many arterial vessels show diffuse calcifications" (Martina *et al.* 2005: 43). There are also "severe signs of arthrosis", and "deformation of the first lumbar vertebra", due to a fracture while Kha was alive (Martina *et al.* 2005: 43, Delorenzi, Grilletto 1989: 33). Kha's gallbladder is filled with stones (Martina *et al.* 2005: 43), fourteen in all, one of which appears "to be lodged in the infundibulum" (Cesarani *et al.* 2009: 1192). The gallstones have characteristics "suggestive of a predominant pigment content" (Cesarani *et al.* 2009: 1192). Kha's dentition shows signs of attrition as well as periodontal disease. His bottom back molars are missing, and the upper back molars have caries (Delorenzi, Grilletto 1989: 32).

Kha's wife, Merit, died as a young woman of 25–30 years of age (Martina 2005: 44). She is missing some teeth, but "few signs of attrition are visible" (Martina *et al.* 2005: 44). No evidence has yet been discovered for the cause of her death.

Two other Deir el-Medina women are mentioned very briefly by Janot, who identified them in a 2001 inventory of the storehouses of the excavation mission at Deir el-Medina. The mummy of an 18th dynasty young woman named Satra has dentition that is "healthy and complete", and "there was a wound on the right side of the abdomen" (Janot 2009: 352). Earlier, Bruyère had noted this wound when he published

the contents of her tomb, TT1388 in the Eastern Cemetery (Bruyère, 1937a: 140 and 195: Figs. 111–112).

Bruyère made a few comments on the pathologies that he found in the human remains from the Eastern cemetery: a young boy in TT1373 was deformed; a little girl in TT1375 was hydrocephalic; a woman in TT1382 perhaps died in childbirth because "un sac membraneux" was between her thighs. He also commented that younger people had good dentition, while older adults had tooth loss and severe attrition (Bruyère 1937a: 139–140). For example, a male mummy in TT1389 is elderly and toothless (Bruyère 1937a: 201).

Another mummy Janot rediscovered in the storehouse was the 18th Dynasty Lady Ta-aat, found in Western Cemetery TT1352, along with her husband Setaou, a young child, probably male, and an adolescent girl (Bruyère 1937b: 102–107). Ta-aat is described as being around forty years of age. Setaou is given an age of sixty; he has only 24 teeth left, many of them decayed.

When Bruyère excavated TT1372 in the Eastern Cemetery, he discovered three children's burials: one of an infant, possibly female, and two young boys (Bruyère 1937a: 161–164). These three remains had been stored in the tomb of Ipouy, TT217, and were rediscovered in 2001 (Janot 2003, 2009: 353). Janot was able to study the remains of the two boys. He estimated that the age of one boy, based on the teeth, was four years old, but based on the bones was between two and a half to three years old. The second boy was six based on the teeth, but only four years old, based on the bones. Janot points out that "il faut noter cet important retard de croissance osseux" (Janot 2003: 177).

Not many Deir el-Medineh mummies are published in catalogues of museum collections. One exception is Strouhal and Vyhnánek's 1979 publication of the ancient Egyptian mummies in Czechoslovakian museums. There are three mummies and three mummy heads in the Hrdlička Museum of Man, Prague from New Kingdom Deir el-Medineh, and there is one more Deir el-Medineh mummy in the District Museum Topolčiany. The mummies in the Hrdlička Museum are all adults, two males, aged 50–70 and 40–50, and one female, aged 50–60. The oldest male had "strongly abraded teeth" and "general osteoporosis". The younger adult male "had insignificant pathological changes", and the woman suffered only dental abrasion and some tooth loss. The mummy in the District Museum Topolčiany is male, aged 25–35. Unusual for his age is the "very advanced abrasion of the teeth" which destroyed most of the teeth crowns. (Strouhal, Vyhnánek 1979: 28–35) Two of the heads were of older adult males, one with all his teeth "intravitaly lost", and the other with extensive tooth loss. The third head was an adult female, but no pathology could be ascertained (Strouhal, Vyhnánek 1979: 68–71).

I hope that this brief article presenting what is known about the mummies of Deir el-Medineh will prompt scholars to come forth with studies on the physical remains of the people from this New Kingdom village. Considering the extensive archaeological and written material we have

from this ancient site, the addition of the vast array of information that could be gathered with modern technology from their human remains, would be remarkable.

ACKNOWLEDGEMENTS

It is with great pleasure that I offer this small study to Dr. Eugen Strouhal in honour of his 80th birthday. I would like to thank the Peabody Museum for allowing me to publish the autopsy information for both Ii-neferti and Khonsu in this article, and Susan Haskell of the Peabody Museum for supplying me the information.

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