THE REMAINS OF QUEEN WERET

Bob Brier*, Michael Zimmerman**

The skeletal remains of Queen Weret of the Twelfth Dynasty (circa 1880 B.C.) were examined. Preliminary conclusions about age at death, health, and related factors are discussed.

Key words: Egypt, royal burials, king Sesostris III.

En este trabajo se presenta un estudio de los restos óseos de la Reina Weret de la duodécima dinastía (1880 A.C.) También se discuten conclusiones preliminares sobre su edad y salud.

Palabras claves: Egipto, tumbas de la realeza, rey Sesostris III.

In the summer of 1995 the Metropolitan Museum of Art's expedition to Dahshur discovered an undisturbed burial of the Middle Kingdom and one of the authors was asked to assist with the moving of the mummy that was still in its sealed sarcophagus. When the lid was removed, the mummy and sarcophagus contents were revealed to be extremely fragile, mostly because of the high humidity (95%) in the tomb. It was clear that a lengthy and careful excavation and recording of the sarcophagus contents would be needed before the mummy could be removed. With a day free, the author was asked to examine the human remains found during excavations of several previous seasons. This paper presents the examination of Oueen Weret of Dynasty XII. It should be noted that there were two Queen Werets of Dynasty XII. The body we report here is the wife of Sesostris III.

Because of extensive tomb robbing during the Second Intermediate Period and subsequent periods of lawlessness, there are no complete mummies of the kings and queens of the Middle Kingdom; thus any physical remains of these rulers are extremely important. Some of the kings and queens of the Twelfth Dynasty were buried at Dahshur, about fifteen miles southwest of Cairo. The mudbrick pyramids of Amenenhat II, Sesostris III, and Amenenhat III were first excavated by Jacques De Morgan (1894-5) and in addition to these monuments, De Morgan also unearthed royal burials of Dynasty XIII. In 1990 the Metropolitan Museum of Art's team, under the direction of Dieter Arnold, began reexamining the pyramid complex of Sesostris III. Around this 60 meter high pyramid runs a brick enclosure wall. In the area between the wall and the

pyramid several royal women, including Queen Weret, were buried far beneath ground level.

The tomb of Weret is important for several reasons. The architecture is of the highest quality, the chambers lined with fine limestone and the burial chamber contains a beautiful red-granite sarcophagus that once held the queen's body. In addition to documenting the architectural features, the Metropolitan Museum's expedition discovered a niche that contained a cache of beautiful jewelry. Along with 7,000 beads were a pair of tiny gold lions, probably elements in a bracelet. A pair of amethyst scarabs bore the names of the pharaoh Amenemhet II who was possibly Weret's father. There are many problems with the chronology of this period, but it is almost certain that Weret was the wife of king Sesostris III.

The Examination

The preliminary examination was made inside the tomb in dim light so the tentative nature of our conclusions should be stressed. Because the examination had not been planned, all B.B. had with him was a pad and pencil, gloves, a Swiss army knife, and a point and shoot camera that he had never used. The hope was that if the photos came out, a leisurely discussion of the Queen's remains with colleagues could reveal information of value.

The tomb had been thoroughly plundered by the time it was first excavated the Queen's mummy ransacked for jewelry and badly damaged. During the Metropolitan Museum's reexcavation of the tomb, they gathered all bones and fragments and placed them in wooden boxes in a side chamber of the tom. As is common with Middle Kingdom mummies, the

Recibido: marzo 1999. Aceptado: diciembre 2000.

^{*} Long Island University, Philosophy Department C W Post College, Greenvale, NY 11548, U.S.A. E-mai1: mumy123@aol.com

^{**} Maimonides Medical Center, Department of Pathology and Laboratory Medicine, Brooklyn, NY. U.S.A.

remains were only skeletal with no soft tissue remaining. The skeleton was far from complete and below is an inventory of what remained.

Skull: complete Maxilla: complete Mandible: complete

Vertebrae: the atlas, 4 thoracic and the remains of 2 centra, 1 lumbar and a centrum fragment, and 3 vertebral fragments.

Humerus: complete left Ulna: complete left Fibula: complete left

Femur: bottom one third of the left femur and the hemisection of the head of the left femur.

Scapula: fragment of left scapula

Pelvis: both hip bones but no trace of the

sacrum

General Observations

It is interesting that of the three complete long bones present, all are from the left side of the body; this might indicate that the tomb robbers ransacked the mummy of the Queen as it lay on its left side, a traditional Middle Kingdom position for burial. This is speculation, but it is clear that the mummy was treated very roughly. No complete rib exists, indeed, no rib fragment is more than 15 cm long. Other fragile bones such as the clavicles are also absent.

The long bones are extremely slender and delicate, suggesting that the Queen had little physical activity. In addition, the bone density strongly suggests osteoporosis. Specific observations discussed below confirm this preliminary observation. From the brief inspection in the tomb of the long bones, it was clear that they were too fragile to remove to the surface without risking damage. They were photographed in the tomb, but the skull and maxilla and mandible were brought to the surface for photographing and examination in better light by Kathy Mucciolo.

Specific Observations

Skull: All sutures are completely closed with obliteration of the sagittal suture indicating that the Queen died well into her 70s. (Figures 1 and 2) This is consistent with the diagnosis of osteoporosis mentioned above. The right zygomatic arch is missing but the left was present. The right side of the occiput is significantly larger that the left, suggesting that Weret



Figure 1. Top cranial view



Figure 2. Posterior cranial view

was left-handed. The sharp nasal sills indicate a Caucasoid person, and this determination was used in our estimate of height discussed below. The remains of what is probably the brain can be seen through the foramen magnum. Brains were not removed regularly during mummi-fication until the New Kingdom so this is consistent with a Middle Kingdom burial.

Maxilla: Eleven teeth were still present. Of the missing 5, two were lost during life as indicated by bone resorption. Right side (Figure 3): The 3rd molar is absent and was probably lost pre-mortem as there is a roughened, faceted area in its position.



Figure 3. Maxilla, right view

However, bone resorption appears minimal and it is more likely that this represents 3rd molar agenesis, with the faceted area representing wear due to the opposing mandibular molar (see below). The 1st and 2nd molars and the 2nd pre-molar show severe wear. The 1st pre-molar is missing post-mortem. The canine and lateral incisor are unremarkable. The medial incisor was lost post-mortem. Left side (Figure 4): The medial incisor was lost pre-mortem with bone resorption. The lateral incisor is unremarkable. The canine ws lost post-mortem. Premolars 1 and 2 show severe wear. M3 was broken off post-mortem and appears to be smaller that M1 and 2.



Figure 4. Maxilla, left view

Mandible: The extremely fragile mandible is cracked to the right side of the midline, and is missing the right condyle. Nine teeth are present, including the 4 incisors and 2 canines, the 1st premolar and 3 posterior molars, one on the right and 2 on the left side (Figures 5 and 6). Both first premolars were lost post-mortem. The right molar is the 3rd, severely angulated forward due to resorption of alveolar bone for M1 and M2. On the left side, the 3rd molar is small and is impacted beneath the 2nd molar.

Vertebrae: Of the vertebrae present, only a lumbar vertebra is worthy of comment. (Figure 7). It shows anterior wedging, indicating kyphosis that is consistent with the diagnosis of osteoporosis.

Upper extremities: The left humerus and left ulna are complete and as mentioned above are extremely thin and delicate. In an attempt to determine the height to Queen Weret, both were measured with the ruler on the Swiss army knife and then photographed against lined paper and traced for additional later measurement. The ulna was 23 3/4 cm and the humerus 29 1/4 cm.

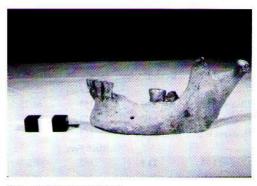


Figure 5. Mandible, left half



Figure 6. Mandible, left half

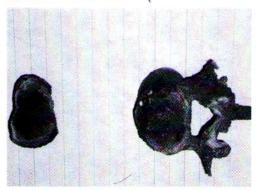


Figure 7. Lumbar vertebra, suggesting kyphosis

Bennett (1993) in his tables for height estimation from long bones gives charts for American white, black, and Mexican females. It is highly unlikely that Queen Weret was Mexican so those tables are not reproduced here. We realize that it is just as unlikely that she was American, but in an attempt to obtain some idea of Weret's stature we reproduce below the chart showing the estimated height for both black and white females aged 70. Because

the nasal sills indicated that Weret was Caucasoid, we are taking as our height estimate 156 cm or 61 in.

Queen Weret	Bennett Obs.	Height cm White Fem.	Height in
Ulna =23.75	23.7	157	61.75
Fibula = 34.5	34.3	158	62.25
Humerus = 29.2	29.2	154	60.5
	,	Black Fem.	
Ulna =23.75	23.8	152	59.875
Fibula = 34.5	34.2	154	60.50
Humerus = 29.2	29.3	153	60.25

Conclusions

Anyone who works in Egyptian tombs is confronted with puzzles. The puzzle here is a recurring one: what happened to a significant part of a mummy? The burial chamber of Queen Weret was extremely inaccessible yet nearly half the mummy is missing and would have had to have been brought up a twenty-meter shaft. Often tomb robbers fear-

ing detection removed mummies from tombs to search the wrappings for jewelry later. Perhaps the robbers began ransacking the mummy of Queen Weret in the tomb, thought they might be discovered and quickly removed the portion of Weret that was still wrapped to the surface for later examination. We will probably never know.

From her physical remains, it seems clear is that Queen Weret, daughter of a pharaoh and wife of a pharaoh lived a life of leisure, virtually free of all physical labor. Although this slightly built woman suffered considerable distress from dental disease, she lived well into her seventies and was buried in a style befitting her royal status.

References Cited

Bennett, K.A.

1993 A Field Guide for Human Skeletal Identification. Charles C. Thomas, Springfield.

De Morgan, J.

1903 Fouilles a Dahchour Mars-Juin 1894 (Vienna, 1895) and Fouilles a Dahchour en 1894-95. Vienna.