MUMMIES FROM THE ROMAN PERIOD IN TOMB NO 19 IN THE ARCHAEOLOGICAL SITE OF OXYRHYNCHUS (EL-BAHNASA, MINYA), EGYPT

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Abstract. The Archaeological Site of Oxyrhynchus (El-Bahnasa), corresponding to the ancient city of Per Medyed, is located 190 km south of Cairo, on the banks of the Bar Yusuf. One of the most interesting tombs from the Roman Period is tomb No. 19 (Sector 26). It is intact, complete and has a single burial chamber with entrance from the north through a limestone shaft. Inside the tomb were found a large number of mummies. All the bodies were bandaged in linen cloth decorated with a diamond design that is very typical of the Roman Period. Some of them have cartonnages with polychrome painted decoration with Egyptian iconography of gods and goddesses and animals (above all sphinxes). One of mummies had next to his left shoulder a terracotta bowl with residues of black balm.

The Archaeological Site of Oxyrhynchus (El-Bahnasa), which corresponds to the ancient city of Per Medyed, is located 190 km south of Cairo, on the banks of the Bar Yusuf. This city was the gateway to the oases of the western deserts, especially to Bahariya.

The University of Barcelona, under leadership of Dr. Josep Padró Parcerisa, has held the concession located on the left bank of the Bar Yusuf since 1992\(^1\). One of the most important areas is the High necropolis with burials from the Saite period up to Christian-byzantine times, and including the Ptolemaic-Roman Period\(^2\).

In Season 2008\(^3\) we started to work to the S.E. the High Necropolis. In this area, Sector 26, we have found so far six Roman tombs\(^4\), which are built with white limestone blocks and with vaulted ceiling, although in some cases these ceilings are not complete, and in some cases have even been totally lost. The tombs have one or more funerary chambers and have produced very interesting findings. One of the most important of them is Tomb No 19 (Fig. 1)\(^5\).

This construction, located to the east of Tomb No 18\(^6\), has only one funerary chamber (5.20 m in length, 2.50 m in width and 2.60 m in height), which is complete. The entrance to the tomb is from the north via a narrow shaft covered with sand (3.10 m in depth and 60 cm diameter)\(^7\), and outside the tomb, close to the south wall, we found a deposit (105cm maximum width, 90 cm minimum width and 135 cm in depth) with some Egloff Type amphorae\(^8\), which were very similar to the amphora found at the entrance of Tomb 18 and room 2 of Tomb 12\(^9\), and ceramic vessels, although some of them were broken.

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1. From 2019 the Mission is under the co-direction of Dr. Mascort Roca, M., and Dr. Pons Mellado, E.
3. The archaeological works has been supervised by Dr. Esther Pons Mellado. Padró et Alii, 2008: 3-16; Pons, 2012: 289-299, fig. 2-6.
4. Tombs No 18-20 (season 2008), Nº 21 (season 2009), Nº 35-36 (season 2014). On the upper layers we found several rooms built with mudbricks of the Christian-Byzantine times.
6. This Tomb has two parallel funerary chambers.
7. This shaft is attached to the funerary chamber and it seems that it was built after the mummies were introduced inside the room.
8. They are very similar to the amphora found at the entrance of Tomb No 18. Padró et Alii, 2008: Pons, 2012: 289-290; Pons, 2016: 168; Pons, 2017: 325-329.
When we removed the sand the well we saw that the funerary chamber was completely full of mummies. They were piled one on top of the other in six layers and we counted around 80-90 mummies (adults and children), although perhaps there are more of them, because the bodies covered almost all the funerary chamber, and it has not yet been possible to get inside the room. All the bodies were placed in line with the entrance (north-south orientation), only the mummy that was located in the entrance of the funerary chamber had an east-west orientation, with the head to the west. We were able to see that in general the mummies were in bad condition and part of the bandages have fallen off, especially in the mummies that were in the upper layers (Fig. 2).
The bandages of the mummies have a diamond design typical in the Roman Period\textsuperscript{10} and in some cases the mummies are even covered with cartonnages with decoration both on the face and on part of the body. The realistic features of the faces and the small curls of the hair are typical of the Roman Period, but the iconography is characteristic of the Egyptian Period: gods and goddess (Isis, Neith, the four sons of Horus), animals (\emph{Uraei}, Mythological animals) and people with offerings.

Initially we decided to take the bodies out of the tomb but very soon we realized that this was not possible for various reasons. The only entrance of the funerary chamber is through the shaft and it is very narrow and deep and we run a great risk of destroying or damaging the mummies. In addition at present we do not have a big enough store to conserve them in good condition.

\textsuperscript{10} For parallels of this type of bandage for mummies: Corcoran, L.H., 1995: 84-125, lám. 1-11; Doxiadis, E., 1995: 40, 139, figs. 10-12; fig. 72; Gemer. R., 1997: 82, fig. 87; Walker, S., and Bierbrier, M., 1997: 78-79, fig. 50.
In the end, we decided to close the shaft and to elaborate a detailed Project Proposal for this interesting finding, but unfortunately time has passed and it has been impossible to carry out the Project.

We do not know if these individuals were originally accompanied by funerary objects, we were only able to discern some fragments of limestone sarcophagus between the mummies, and only the corpse that was in the entrance had next to his head a red clay bowl with the remains of hardened balms.

We cannot say when this group of mummies were placed inside the funerary chamber, and why the ancient Egyptians decided to keep them here, but it is quite possible that this room was a secret chamber conceived as a way of protecting the mummies and avoiding their loss in the case of the destruction of the Roman Necropolis in what were difficult times for the city of Oxyrhynchus.

From the study of this Roman tomb, we have been able to reach some very interesting conclusions. The arrival of the Romans in Egypt was without doubt a period of change that affected many aspects of Egyptian life and especially its funerary customs, but also Egypt could keep some of its authentic traditions.

For example the process of mummification was not abandoned and the Egyptian funerary practices continued throughout these new times.

The decoration of the cartonnages of some of the mummies found in this tomb possesses characteristics of both cultures. Both the faces, that tend to be realistic rather than idealistic, and the way the locks of the hair are represented, are typical of this new Roman era, but the human representations, griffins, deities and animals are typical of the Egyptian iconography.

The linen bandages that cover the bodies have a diamond design very characteristic of the Roman world and even the feet are also bandaged in a kind of rectangular box as if it were a cartonnage.\textsuperscript{11}

There is also an important change in the funerary and religious objects. Although it is true that we do not know if the individuals of this tomb were accompanied by funerary objects, the Egloff Type amphorae and the ceramic vessels found in the pit are characteristic of the Roman Period.\textsuperscript{12}

\textsuperscript{11} We have found this kind of diamond design in the bandages of the mummies of Tombs Nº 35 and 36 of this Sector, and also in many mummies of other Sectors of the High Necropolis. Padró et Alii: 17, fig. 12; Pons, 2012: 291; Pons, 2016: 168; Pons, 2017: 336-339.

\textsuperscript{12} These new objects indicate a new way of understanding the funerary world and, little by little, the typical Egyptian objects such as ushabtis or canopic jars disappearance of the tombs.
In conclusion, although the syncretism between the Egyptian and Roman culture is clearly reflected in the findings discovered in this tomb we are sure that subsequent excavations will give us more information about Egyptian funerary customs during the Roman period.

THE MUMMIES’ STUDY

Preliminary remarks: The mummies’ study concerns only three individuals who were laying near the entrance of the tomb. To free the entrance of the tomb, it was necessary to remove all the sand accumulated on the doorstep. The wrappings are teared or decomposed and we can see bones without mummified tissues, that showed the bad state of the mummies’ preservation. The numbering given to the mummies corresponds in line of the individuals near the doorstep of the tomb. Only those who were the most accessible were studied. During this study, the mummies splited one after the other, then fragmented one by one, because their big fragility did not permit to keep them unbroken in situ, during the study. The tangle of the bodies did not allow a complete study of the deceased. So, the fragments that grew away from the mummies could be studied, unlike to parts of the body that were covered by wrappings and adhered to other mummies. The lack of space in the very tiny entrance of the tomb at the foot of the entrance and the lack of the light made impossible to take pictures from these mummies who lied down at the entrance of the tomb.

Two mummies were first taken (Oxy 2008-1, Oxy 2008-9), other individuals stayed in situ, not to weaken more the mummies who were under the others. The mummy’s head (Oxy 2008-10) who falled down, was studied, but not the body who was under an other one.

Mummy Oxy 2008-1

This adult male’s mummy, reduced to skeleton state, with decomposing wrappings, was oriented east-west, with the head to the west.

Stature: 1m 69 height, 40 cm wide of shoulders.

Description: The mummy lied down to some centimeters from the doorstep of the tomb, in dorsal position, the pelvis and the thighs on a wide flat stone, used like a substitute of sarcophagus. The external textiles are decomposed. The mummified tissues, present in all the parts of the body, were burned, in black colour, around the skeleton.
The head is entirely covered by wrappings: skull and cervical rachis are in anatomical connexion. An endoscopy of the endocranium was made. It allows to show one voluminous and hard mass moulding the occipital bone, constituted by balms and creating an occipital shield. This mummy was treated by brain removal and filling the cranium with balms. Balms migrating from endocranium are found staying at the level of the neck. The well preserved dentition contains four wisdom teeth, seen in norma basilaris.

The cervical rachis and the hyoid cartilage are completely held in place by the bandages. Small fly pupæ have infested the neck and the spondylous bodies. It was an indication of the bad quality of the mummification. During the examination of the cervical rachis, the atlas is staying connected to the occipital condyles. The spine is affected by several pathologies: a right lumbar scoliosis, with sacrum scale on the right, but without spondilous rotation, osteoarthritis of lumbar rachis increased the pre-existing scoliosis lesion with osteophytes, a right coxitis (iliac print of the right femur and the external edge of acetabulum coxa show osteophytes), osteoarthritis of thoracic rachis with osteophytosis on the left side (on the T1-T3 and T11-T12 vertebras).

With such lesions, this man was suffering from rachial aches.

The pulmonary tissue is totally burned by the balms, poured inside the thoracic cavity.

The upper limbs are extending, with the volar region of hands flat on the upper face of the thighs. The bones of the right hand are completely blackened by the contact with boiling balms. The right elbow joint shows osteoarthritis. Discrete trait: the left humerus carries a little perforation on the humeral palette (one-sided only).

The femurs measure 45 cm length (physiological length), allowing to determine a stature of 1m69 (male)\(^1\), the left is broken post-mortem in two parts, the left fibula, in three parts, post-mortem too. The left patella is not found. The left foot shows a good preservation: the mummified tissues are adhering to the calcaneum, and at the distal tip of the phalanxes, the nails are present. Balms were poured between the thighs. Right leg and foot stay in the tomb, the head of the mummy n°3 laying above them. The right femur shows a myositis ossificans, situated on the di-

aphysis posterior face (Fig. 3). This lesion could be sequential to a muscular stress on the insertion by physical repeated effort or by a trauma.

Wrappings: Bandages covered all the parts of the body. The weaving of the internal wrappings is less fine. The presence of a shroud cannot be determined with certainty, because the external wrappings are decomposed. No decorating bandage is visible. The end of twisted band was put back up in the middle of the face, to make a substitute of profile, characteristic from Late Period. Some bandage revolutions are visible at the base of the neck and under the chin. Under the pelvis, ten textile layers can be counted. The left foot was entirely wrapped in a brown textile piece, with regular weaving, but thick, roughly folded, without band.

State of preservation: The mummy, laying across at the entrance of the tomb, was covered by the sand, his external wrappings were crumbling into dust. The surrounding humidity did not allow a good textile preservation, whose consequence was to fragilize the mummy.

Mummification practices observed: Brain removal with filling the cranium with balms, thoraco-abdominal evisceration, upper limbs extending, with the volar region of hands flat on the upper face of the thighs, balms seen in the cranium, the neck, and between the thighs.

Sex and age at the time of death: This mummy was adult male (sexual diagnosis from coxa examination), age evaluation to 40-45 years old (aspect of pubic symphysis). The greater iliac incisure is asymmetric, wider on the right side.

Associated material: A terra cota bowl (Oxy 2008-127), in a good state of preservation, without pattern, containing black balms residues, was find near the
left shoulder, in the sand. This object was put down by the embalmer, near the mummy, inside the tomb, and forgotten there.

**Mummy Oxy 2008-9**

This adult male’s mummy, reduced to skeleton state, with decomposing wrappings, was oriented east-west, with the head to the east. His stature could be estimated at 1m70.

The mummy could not be studied totally, because the head of another one layed on his thorax. So, several parts of the body were not studied, like the left upper limb, cervical and thoracic rachis, and skull. Terra cota potsherds are seen around the mummy.

**Description:** The mummy laid on dorsal position, head to tail, in parallel and partly under the mummy 2008-1. She is completely covered by wrappings, but textile is in decomposition state. Mummified tissues are found in the thoraco-abdominal cavity, that constituted an hard and black mixture with textiles. Pubic symphysis is disconnected, with a large space.

The upper limbs are in extension, along the body, the hands one above the other tired out, the left above the right, in front of the pubic. The left fore arm was broken *post-mortem*.

The femurs measure 46 cm (physiological length), allow to estimate this individual’s stature to 1m 70\(^14\). The right knee shows arthrosis lesions: two condyles of the right femur; the edge of the patella, the tibial plateau show osteophytes. Intercondylar eminences of tibiae are very blunt (erosion of the bone). Strong tibial spine (enthesis) indicates a developed musculature of this man. The calcaneum of the right foot shows modification of the shape, the left one wears osteophytes, characteristic of arthrosis of the feet. A long exostosis (5.5 cm long), drilled by a vascular orifice, on the antero-internal part of the diaphysis of left femur (insertion of the quadriceps), corresponds to the internal face of the thigh\(^15\) (Fig. 4).

The skeleton of this man bears several lesions. A bilateral mild coxitis is characterized by an osteophytosis in different parts: at the edge of the acetabulum and around the insertion fossa of the interarticular ligament of hip joint and of the iliac print on the right femur; the left femur presents the same lesions and, also, on the

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\(^14\) Trotter and Gleser, *op. cit. supra.*

\(^15\) It would be possible that this man had received a direct trauma on the thigh.
little trochanter and the internal edge of the internal condyle. The lumbar rachis is the seat of a left scoliosis, an arthritis with osteophytes, and a compression of vertebra L5 and deformation of L4 with cuneiform shape on the left (asymmetric compression) (Fig. 5).

This man had to do a work with carrying heavy loads to develop such pathologies.

Wrappings: Longitudinal bands were put on the sides of the limbs to stiffen the mummy. The textiles are decomposed and fall in dust.

Mummification practices: They are difficult to evaluate, without examination of the head and with the very bad state of preservation, no balms were found on the body. Thoraco-abdominal evisceration was not sure.

Sex and age at the time of death: The sexual diagnosis was realized from coxa examination, only visible. The little information for evaluate the age (adult) at the death are the pubic symphysis with blunt reliefs\(^{16}\) and striae viewn on the auricular surface of the hip bone\(^{17}\).

\(^{16}\) Age determination according to Ascadi and Nemeskeri method.

\(^{17}\) Debono, Mafart, Guipert, and Jeusel, 2004 : 115-120.
Mummy Oxy 2008-10

This adult woman’s mummy, mature to old, is skeletonized, with the head separated from the body. She was oriented south-north, with the head to the north. Stature: unknown.

Description: The mummy layed down with dorsal decubitus, on the tomb floor, under the mummy number 2008-4 (who was not studied).

The skull, without bandaging, appears with a fine bone structure, the temporal lines are very accentuated, extended into the back of the skull. The skull shape is ellipsoid, dolichocranial kind. The nasal bone is well preserved, showing the good protection of the nose during the bandaging of the face. The nasal fossae are intact, the nasal septum shows a slight deviation to the left, the nasal aperture is large. Pads stuffing cover the eyes preserved at the bottom of the eye-sockets, that have square shape. A slight mummified tissue layer covers the frontal bone.

The endocranium contains the brain, forming a dried characteristic mass. The coronal suture and the half of the sagittal show synostosis and are perceptible to the eye with difficulty. At the level of lambda, the sagittal suture (S4) and the lambdoid (L1) are in the course of synostosis, these characteristics allow to evaluate an age about fifty.
The occipital bone shows the external creast non accentuated and the cerebellar fossae increased at the basilar region. Two foramina (deep around 0.5 cm) can be seen at the right of the external creast.

The mastoid apophysis are small and large. The mandibula shows angles of jaw with «external looking». The chin is forward, characteristic of an aged toothless person.

The dental state is very bad, with a change of the alveolar bone. The remaining teeth show an important abrasion (degree 4 to 4+ according to the graduate table of Brothwell\textsuperscript{18}). The molar 36 is carious, the mandibula shows an osteolysis. Teeth present: 14, 23, 25, 44, 45, 34, 35, 36. Tooth 46 was lost post-mortem. All the other teeths were lost ante-mortem.

Right scapula wears osteophytes on the internal edge of the condyloid fossa characteristic of an arthrosis.

\textit{Mummification practices observed:} The cranium contains the brain that was not removed, the dried eyes at the bottom of eye-sockets were covered by pads, the treatment of thoraco-abdominal cavity is unknown, balms are missing for the head and the neck, the wrappings are decomposed.

\textit{Sex and age at the time of death:} The skull shows feminal sexual characteristics, but without possibility to compare the conclusion with the study of the coxal bone. Tooth wear and synostosis of cranial sutures indicate the maturity of this woman whose age can be evaluate to fifty.

\section*{CONCLUSION}

The tomb 19 of the necropolis of Oxyrhynchus is a collective tomb containing a lot of mummies, probably individuals belonging to several families living at the same period, where we can find adults of two sexes and children. All of them are covered by the wrappings, the most rich wearing cartonnages that seem with little thickness and fragile. The state of preservation seems better apparently than in reality for the mummified tissues. The mummies are skeletonized inside the wrappings. Although the tomb was discovered undisturbed, the surrounding humidity in the necropolis had contributed towards mummies’ progressive destruction whose wrappings are in the course of decomposing, splitting at the slightest touch, like the several cartonnages on a large number of mummies that decayed with humidity.

\textsuperscript{18} Brothwell, 1963 : 67-70.
All the difficulties that we met during the study of the three first mummies, in a very small space without light, oblige us to close the tomb without the possibility to realize an individual and collective study without definitive destruction of the mummies and cartonnages. The population count turns out to be very difficult.

**Oxyrhynchos Necropolis: Tomb 19 Mummies’ Study**

**Table 1. Mummification practices.**

<table>
<thead>
<tr>
<th>Mummies</th>
<th>Skull</th>
<th>Thoraco-abdominal cavity</th>
<th>Upper limbs</th>
<th>Balms</th>
<th>Wrappings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxy 2008-1</td>
<td>Brain removal and filling the cranium with balms</td>
<td>Eviscerated</td>
<td>Extending with hands flat on the upper face of the thighs</td>
<td>- Endocranial - Poured between the thighs</td>
<td>Without decoration External wrappings decomposed</td>
</tr>
<tr>
<td>Oxy 2008-9</td>
<td>Skull not examined</td>
<td>?</td>
<td>Extending hands, the left above the right tired out, in front of the pubis</td>
<td>Not found</td>
<td>Decomposed</td>
</tr>
<tr>
<td>Oxy 2008-10</td>
<td>Brain remains inside the cranium</td>
<td>Not examined</td>
<td>Not examined</td>
<td>Not found</td>
<td>Decomposed</td>
</tr>
</tbody>
</table>

**Table 2. State of health.**

<table>
<thead>
<tr>
<th>Mummies</th>
<th>Sex - Age</th>
<th>Scoliosis</th>
<th>Osteoarthritis</th>
<th>Odontology</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxy 2008-1</td>
<td>Man adult 40-45 old</td>
<td>Right lombar</td>
<td>Rachis th.-lombar Right coxitis Osteoarthritis on right elbow joint</td>
<td>Teeth not seen</td>
<td>Myositis ossificans on the right femur</td>
</tr>
<tr>
<td>Oxy 2008-9</td>
<td>Man adult</td>
<td>Left lombar</td>
<td>Bilateral coxitis Arthrosis of the right knee Arthrosis of lumbar rachis with compression of vertebra L5 and cuneiformation L4</td>
<td>Skull non examined</td>
<td>Long exostosis on left femur</td>
</tr>
<tr>
<td>Oxy 2008-10</td>
<td>Woman mature to old</td>
<td>Rachis non examined</td>
<td>Right shoulder</td>
<td>Missing teeth Abrasion st. 4 Decayed tooth 36 with mandibula osteolysis</td>
<td></td>
</tr>
</tbody>
</table>
The three mummies partially studied show the minimal use of balms, that can have contributed to the poor preservation of the mummies. Without doubt, too, the mummification was not of good quality, in spite of the care brought to the mono or polychrome bandaging for the mummies who were at the bottom of the tomb. These three mummies have not neither rhomboid-patterned wrappings, nor cartonnages, unlike those who were at the bottom of the tomb. Probably, these mummies were more recent (in relation with their position at the entrance) and with modest means.

We can note, too, that the three individuals were suffering of osteoarthritis in the body parts that were examined. It is a common pathology in this necropolis for the population who lived during this late period.

The mummies’ dating is probably more recent than the Ptolemaic period suggested for this tomb, the mummies could be dating from Graeco-Roman or Roman period. A reoccupation of the tomb was probably used during Roman period. Taking into account the mummies’ extreme fragility, that we could not leave outside of the tomb without destroying them, the decision to close the tomb was taken. The three mummies who were given to fragmentary study were brought back inside the tomb, before to close it.

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