

ANTHROPOLOGICAL AND PALAEOPATHOLOGICAL
ACTIVITIES IN EGYPT IN 2001

I.

Thanks to the kind invitation by the Field Directors of the Leiden Mission to the New Kingdom Necropolis at Saqqara, I continued my co-operation with the mission (formerly E. E. S. – Leiden) started already in 1976, during January and February 2001.

The main aim of the season was an analysis of the human skeletal remains found by the Expedition in Chamber A of Shaft 99/I, dated Ptolemaic Period, during the last week of season 2000. Most of the mummies were broken and their fragments dispersed by robbers, except for 14 individuals whose parts could still be identified by the archaeologists. The bulk of the material consisted of isolated bones.

The material was first cleaned of dust and resin, then sorted according to its find spots: burial niches Nos. 1–5, the burial chamber itself (No. 6) and the lower parts of the shaft (–2 to –10 m). In the material from the niches it proved possible to assign bones according to their age and sex for reconstruction of individuals, due to the low number of burials.

For the chamber itself such procedure was seldom possible due to the big number of burials. Because of pressure of time, the chamber material (except for 9 individuals) was studied preliminarily only by skulls with mandibles. This revealed the presence of minimally 31 additional individuals. The postcranial bones were sorted according to their anatomical kinds, observing their associations with baskets in which they were collected during their lifting. This should enable a trial for their association with the pertaining skulls and reconstruction of further individuals during the next season. Should this prove to be impossible, they will be studied bone by bone.

The preliminary number of ascertained individuals in whole Chamber A of Shaft 99/I was found to be 73. The majority of them – 40, were buried in the burial chamber itself (No. 6). Of the niches, the two slightly larger ones situated nearer to the entrance, No. 5 (10 individuals) and No. 1 (9 individuals), contained more burials than the slightly smaller and more distant ones Nos. 2 and 4 (each with 5 individuals respectively), and the two tiny niches in the rear wall of the chamber (Nos. 3a and 3b) containing a single individual each.

Of the total number, the majority of 50 individuals were adults (68.5%). Of them, males (32, 64%) dominated highly over females (18, 36%). On the other hand, the share of immatures (individuals less than 20 years old) was very low (23, 31.5%). These consisted of 7 juveniles (14–19.9 years old), all males, 13 children (2–13.9 years old) and only 3 infants (0–1.9 years old). The masculinity index calculated for adults and juveniles amounts to an extraordinary high value of 2166.7.

Also the mean ages at death of this particular burial group – 27.8 years (38.2 years for adult males and 33.0 years for adult females), are unusually high if compared with other roughly contemporaneous Egyptian series. Thus, e.g. in the 7th century B.C. and the 1st century A.D. series from the Mastaba of Ptahshepses at Abusir the mean age at death for the whole series was 19.5 years, for adult males 33.3 years and for adult females 32.3 years (Strouhal, Bareš 1993).

These results reveal a demographically anomalous group, without any doubt selected socially, with preferential burials of adult and juvenile males and a clear underrepresentation of females and infants.

Special attention was devoted to the detection of palaeopathological finds. There were several congenital anomalies, some of them found in a couple of individuals, betraying their blood relationship (e.g. not fused sternbrae, spondylolysis and spondylolisthesis, cervical ribs etc.). Mostly degenerative productive changes of joints, osteophytosis of spine and osteochondrosis of intervertebral plates, related to ageing, occurred. Injuries were less common, involving compressive fractures of 3 lumbar vertebrae and fractures of 3 long extremity bones. Tooth loss was caused by severe dental attrition, periodontitis combined with calculus and by caries, accompanied by its sequels as dental cysts. A population biological study of this burial group, aimed at corroboration of a hypothesis of their family relationship, has been designed for a future season.

II.

As continuation of my previous investigation of the mummy of Priest Iufaa unearthed by the mission of the Czech Institute of Egyptology in 1998 in his inviolated Shaft-tomb at Abusir, dated Late Period (27th Dynasty), I was invited to take part in the Institute's field work in the area east of the tomb during the first half of March 2001.

In the corridor continuing from the bottom of Shaft 2/R/01 situated 4 m east of the Shaft-Tomb, two relatively well-preserved burials, unmolested by any robbery, were found. Remains of a third burial damaged by tomb robbers, were discovered in the corridor adjoining Shaft 1/R/01 in distance of 25 m further to the east. Both shafts were contemporary, the second one possibly even slightly younger, than the Shaft-tomb.

Three originally mummified individuals who turned into mere skeletons were examined. The first was that of Imakheruresnet, a 35–45-year-old female with not very gracile, well mineralized skeletal built, well-developed muscular relief and small stature (about 151 cm). The second one, buried after her, was of Nekawer "the God's father", a 55–65-year-old male, with extremely gracile body built and signs of senile atrophy, but still retaining features of originally strongly developed muscularity, and of low stature (159 cm) as well. The third one, Padihor "the royal acquaintance", a 28–32-year-old male, showed a thick-vaulted skull, a very robust postcranial skeleton, high stature (173 cm), but only moderate muscular relief.

Craniometrics of the first two individuals were compared with that of the 25–30-year-old Iufaa "the lector-priest and overseer of King's palace at Sais". This analysis proved that neurocranial and facial breadth measurements were similar in Imakheruresnet and Nekawer, but different with Iufaa who showed an anomalous platycrany. At the same time, other facial dimensions proved to be similar in all three individuals. Similarities were revealed also in half of cranial indices, majority of facial profile angles and in several cranioscopic features. Blood relationship between the mentioned three individuals was further enhanced by common share of several congenital anomalies (biparietal thinness, cranial variation of the spine with sacralization of the fifth lumbar vertebra, foramen arcuatum atlantis, absence of Schmorl's nodes, etc.).

Close relationship between Iufaa and Imakheruresnet was, at the same time, ascertained by textual evidence on their mother of the same name Ankhtisi, indicating that they were most probably brother and sister. Nekawer, also closely related to them, could have been either their father, or another brother, less probably a son of Imakheruresnet.

In distinction to it, Padihor's skull, preserved only in several fragments, could not be compared metrically, while his few preserved cranioscopic and all postcranial features revealed no apparent similarity with the previous three persons.

In all three studied skeletons several palaeopathological changes were revealed. Imakheruresnet suffered by an infected spiral fracture of right crural bones which healed well without major dislocation, probably thanks to a medical intervention. She was afflicted by degenerative osteoarthritis, especially in her hip joints. A benign tumour (neurilemmoma) left a large round cavity in her sacrum.

Nekawer showed a severe degree of osteoarthritis in his right hip joint, less progressed osteophytosis of the spine and less teeth abrasion than expected considering his high age, but several tooth caries.

Padihor was affected already in his young age by degenerative omarthritis and coxarthrosis. Severe attrition developed on anterior side of his lower frontal teeth, caused probably by some working or habitual activity.

REFERENCES

STROUHAL E., BAREŠ L., 1993: *Secondary Cemetery in the Mastaba of Ptahshepses at Abusir*. Charles University, Prague.

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