

RESCUE EXCAVATION OF AN EARLY BRONZE (EB-IV) TOMB AT ABŪ RIDIN/NĀ'ŪR TOWN

Adeib I. Abu Shmais and 'Abdullah al-Nabulsi

ARCHAEOLOGICAL SECTION

by Adeib Abu Shmais

'Ammān District, 'Ammān, Jordanian Map Coordinates 521816N, 38882E

On the 17th of December 2001, during an enlargement of Nā'ūr main road alongside of the police station, some pottery objects were discovered among the digging spoil. In this case, with the cooperation of the police, the Mayor and the Department of Antiquities of Jordan, the archaeological team completed the mission in a few days.

The work began on the 20th of December 2001 and involved Adeib I. Abu Shmais (archaeologist) and Dr. 'Abdullah Nabulsi (anthropologist), and also three workers from the municipality, Tahseen al-Helw as driver and three other workers from the DoA, the drawings were inked by J. Safi and Q. Dasuqi. The work was accomplished under hard circumstances of heavy rain and rapid flooding into the tomb chamber.

This project is 001, the first entry in the Osteo-lab Registry database in the 'Ammān Antiquities Office.

Area Description

This cemetery is located on the east side of Nā'ūr (ناعور) town, Ḥayy Abū Ridin (حي ابو ردين), which was a traditional town during the last century (Fig. 1).

The tombs are situated on a single terrace (Fig. 2). The geological layers consist of soft limestone. The ridge of this mount is covered with trees. Four of these chambers were discovered on the higher side of the terrace. The shafts of the tombs seem to continue on a north-south line down the slope to Jordan Valley.

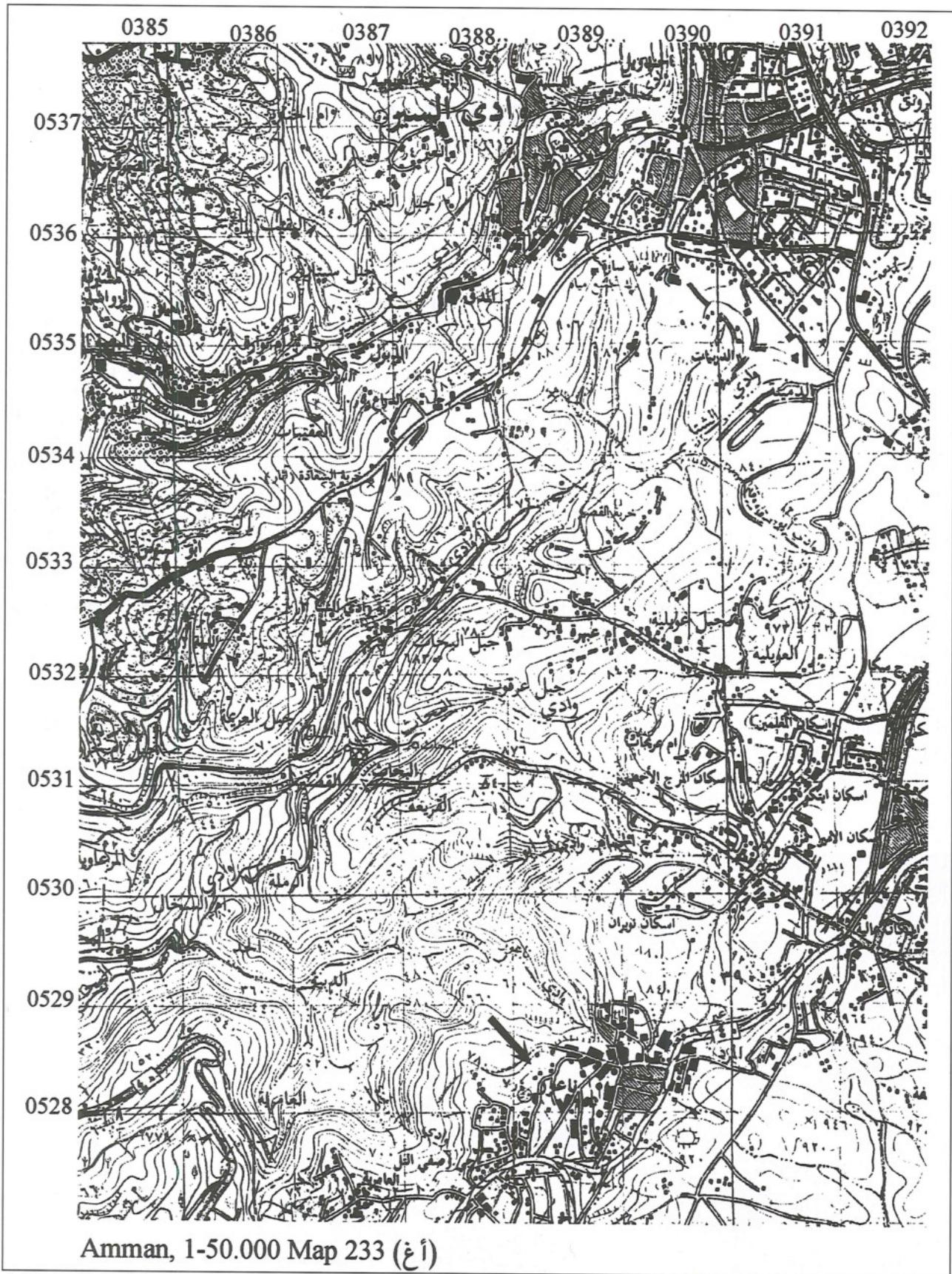
In our local survey we noted that many tombs were robbed and disturbed along this ridge. Some of them were reused as shelters or storage for sewage water about 80 years ago.

Surface Survey

There were no evidences of pottery sherds on the surface of this plateau. Nevertheless, there were visible squared marks of shaft tombs, and there were caves on the east side of the main road, which were uncovered by the Ministry of General Works



1. The traditional house, Abū Ridin village, on the Ridge of al-Balqā' Mountains.



2. The location of the site (Nā'ūr region).

about 30 years ago. There is no doubt that the burial chambers were man-made. The grave has two chambers opposing each other from a single shaft, these chambers are of the same size. They are rounded and had stones blocking the entrance leading to vertical shafts. The best example of this tomb is 4A/B (Helms and McCreery 1988), and is similar to a burial at Sports City (Zayadine 1978), and in al-'Umayri discovered recently by Waheeb and Palumbo (1993).

Tomb Description

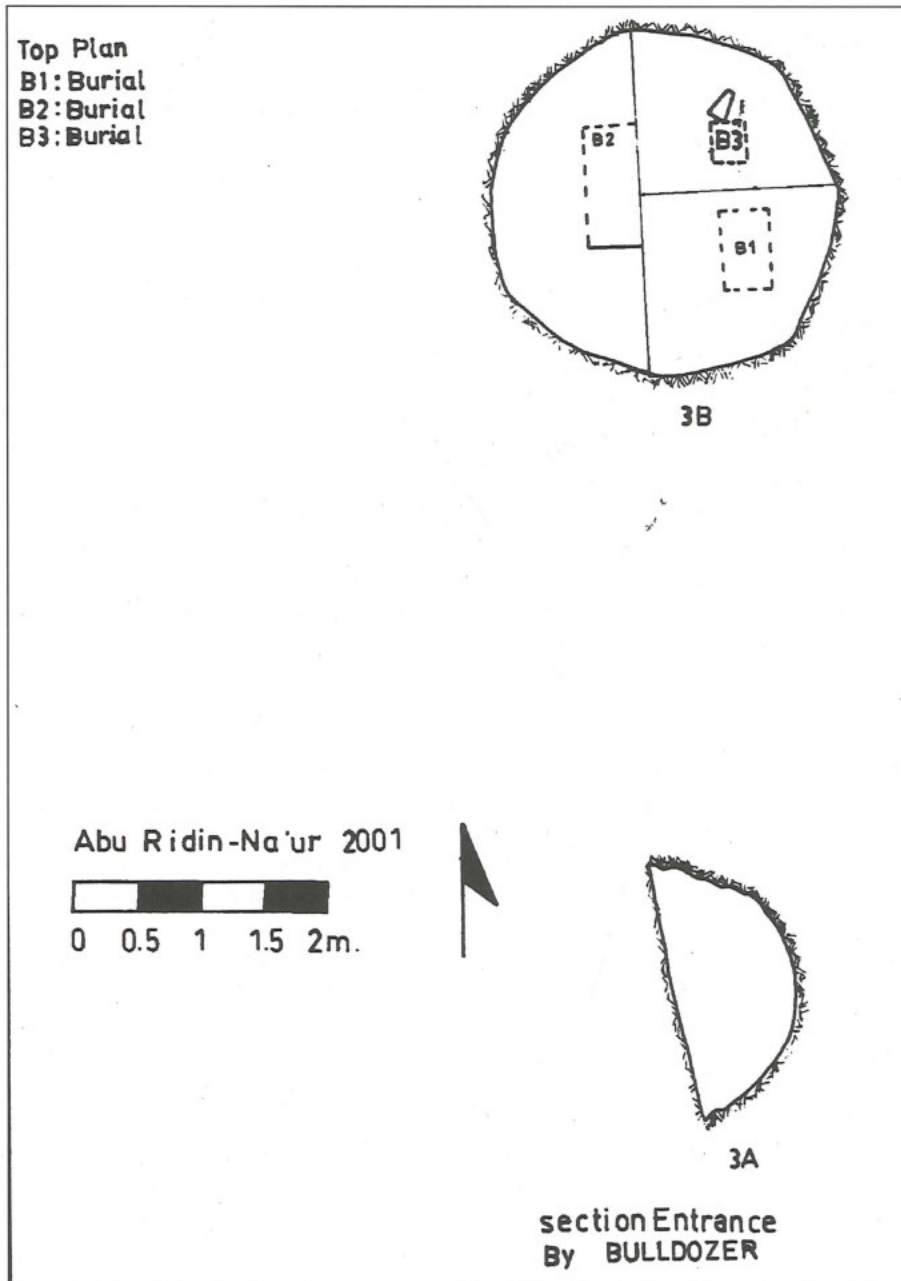
A huge rock blocks the new entrance of one of the opened chambers. The section faced in the east-

west direction to the chamber (274 x 190cm), but the remains of the chamber became round in shape, which is like the tomb entrance now (Fig. 3A).

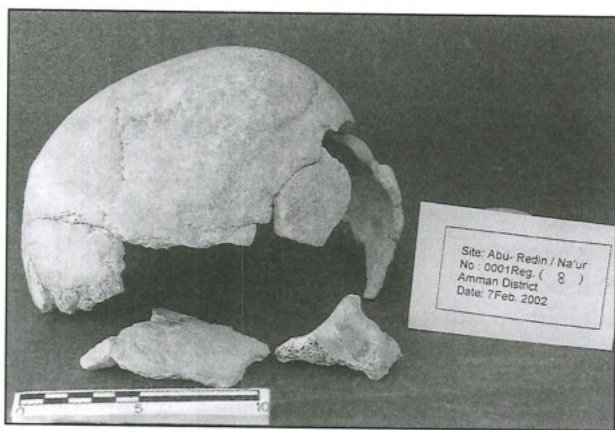
A few bone fragments of skull were scattered (B1, B2) just after removing a huge rock (Fig. 4).

Locus No.1: A stone measuring 35 x 20cm is located beside the main entrance of the shaft, and is lying on the floor of the chamber (Fig. 3B). This is usually the result of pressure from silt coming through the shaft of the tomb (195cm deep). Some remains entered the chamber with this silt.

The new entrance measures 220cm wide north-south and 110cm high. The limestone layer above consists of a soft limestone 180cm thick, and easy



3. Top plan of the chamber.



4. Fragments of skull Burial (B1).

to cut or chiseled. The ceiling of the chamber has a good finish with a faint black color of smoke. This is parallel with hinterland tombs on both sides of the river. Moreover, there is exposed mixed pottery, this means that the new soil entered the chamber during the destruction.

Clean-up Locus: this work seemed very slow because of the rain. It was a new horizontal layer mixed with some crushed medium and small stones spread on the first half on the chamber floor. Fragments of skull and human bones, very few pottery sherds and tiny pieces of copper were found in this soil layer. It was a 4.5cm thick layer and consists of natural lime soil. This equates to Locus No.1, a chert stone, as mentioned above, rested in front of the main entrance of the shaft and was still visible on the floor of the burial (Fig. 3B, burial 3).

Locus No.2: it consists of a thin dump layer of soft limestone earth mixed with red soil 5-7cm thick. It could be the layer which covered the tomb chamber floor. It was prepared for resting the body.

Burial 2, mixed with triangular stones, extends on this soil (40 x 96cm). This looks used in that an amulet was found there (Field No.1).

Locus No.3: Burial 1 (Fig. 3B) recovered 7cm. A thick layer of red soil, like red clay, covers this portion of the chamber floor to provide a bed for the burial. This burial, oriented north-south, appears to be *in situ*. Human bones of an old man were found in the fine red earthen layer (Fig. 4).

Locus No.4 (B3): This sterile deposit is in the shaft entrance to the chamber from the north side (Fig. 5). The silt is 54cm in thickness. Part of this burial was still *in situ* on the bedding layer.

The loci have more than one adult in the chamber, and the analyses of this section will be discussed by anthropologist Dr. Nabulsi in this article.

As I mentioned before this burial contains three individuals (Fig. 3B), some of the human remains

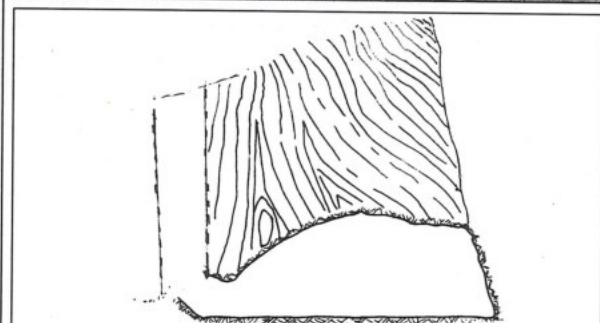


Fig (5)

Abu-Redin-Na'ur.
Dec-24-2001. Section : A-A



5. Side view of the chamber and section A-A.

are still *in situ*. The main finds were pottery objects. Therefore, I will carefully present the general characteristics of this pottery.

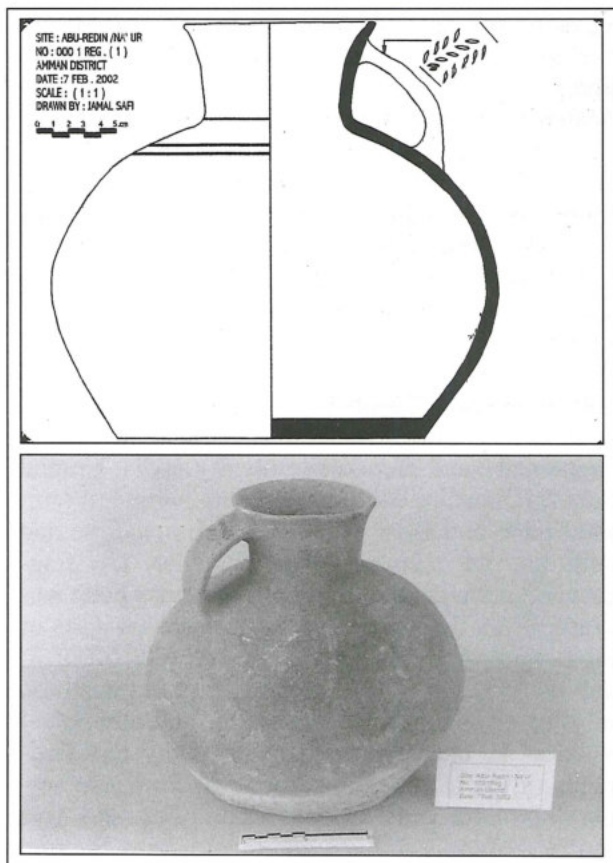
All of pottery assemblages were uncovered under rescue conditions (Zayadine 1978; Suleiman 1985; Helms 1988; Dajani 1967 and Hadidi 1982). It may be a local group. There were a few remains of occupational sites found in 'Ammān region relating to these tombs.

Jars, divided into two types, the largest ones are made with strap handle. The jugs have loop handles.

Plain jars with slightly averted rims are common in the central region of Jordan. Parallel — incised bands of lines on the shoulder of jars have flat round bases. MB-EBIV types are more frequent on the east bank of Jordan River.

Object Descriptions

Field No. 1 (Fig. 6) Hemispherical jar with an averted rim; height 35.8cm; diameter 11.5cm; thickness 4-5cm, sandy temper core: grayish brown (10YR4/2). One strap handle under the rim, the



6. Hemispherical jar with an averted rim, incised decoration on the handle of the jar.

handle is decorated by three bands of incised slashes beside the neck. It has a flat rounded base.

Parallels have been found at Tall al-Ḥayyāt (Falconer and Magness-Gardiner 1983), Iktānū (Prag 1996), and Umm al-Bighāl (Helms and McCreery 1982).

Field No. 2 Hemispherical jar: vertical neck; simple round rim; EBIII-IV; height 21.9cm; diameter 10.2cm; grayish brown (10YR4/2); rough in shape, incised lines on the shoulder and strap handle.

Parallels: as in field No.1.

Field No. 3, simple round jar with an averted rim; height 20.6cm; diameter 10.1cm; grayish brown (10YR4/2); sand temper; loop handle higher than the rim, EBIII-IV.

Parallels, as in field No.1, and also Bāb adh-Dhrā' (Schaub and Rest 1989). Khirbat al-Ḥimmah (Wightman 1988).

Field No. 4, Small round jar; height 16.7cm; diameter 9.3cm; grayish pink (10YR6/6); loop handle touches the rim.

Parallels were found at Tall al-Ḥayyāt (Falconer and Magness-Gardiner 1983), 'Irāq an-Na'sāna (Dever 1973), and al-Ḥuṣn (Harding and Isserlin

1953).

Field No. 6 (Fig. 7) Saucer lamp with four spouts; height 5cm; diameter 8.4cm; reddish yellow (5YR6/6); large white inclusions; hand made, EBIII-IV.

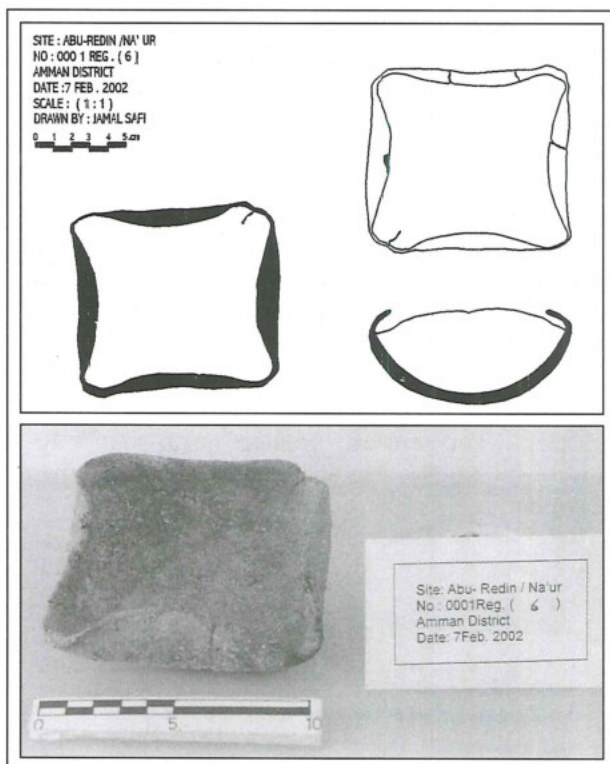
Parallels were found at Umm al Bighāl (Helms and McCreery 1982), Jabal al-Jawfa in 'Ammān (1982), and Ṭiwāl ash-Sharqī (Helms 1983).

Field No. 9 Bronze tools, complete pin, fragments of stick cover (ring in shape).

Conclusion

According to previous studies of the early Bronze Age this region has no evidence of settlements during the EBIV period (2300-2000BC). However, there are magnificent numbers of tombs in the central plateau of H.K. of Jordan (Falconer 1988; Glueck 1951; Ibrahim *et al.* 1976; Peterman 1992).

Therefore, this should explain the changing settlement patterns during the early Bronze Age, and complemented the idea of their pastoral life. In addition, it brings up the need for new investigations. This theory becomes a reality after the discovery of these tombs along valleys and hinterlands. This reflects the change of environment and climate and their dependency on raising animals. In such a case, there is very little evidence of settlements. The tribes of these settlements have dwellings, the



7. Saucer lamp with four nozzle.

best example is Tall al-'Umayri, an Early Bronze II-IV domestication area, and other structures related to this period found on the west bank of the airport.

HUMAN OSTEOLOGICAL REPORT
by 'Abdullah al-Nabulsi

Introduction

The present report documents the preliminary macroscopic analysis of the human skeletal remains obtained during a salvage excavation of an EB-IV chamber burial in Abu Ridin (Na'ur town within Great 'Ammān) exposed by road works.

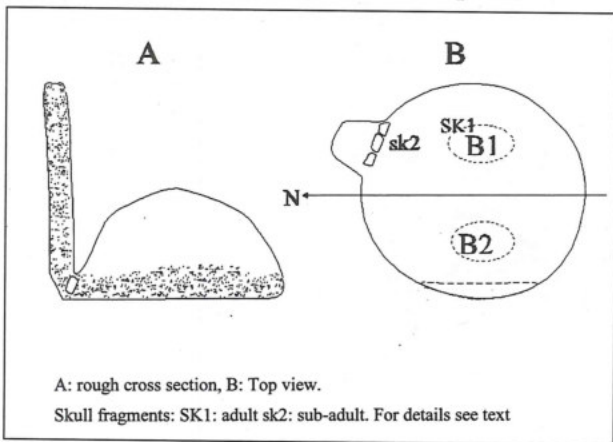
A- Excavation of the Material

This part includes excavation information relevant to this report. Adeeb Abu Shmais presents further details in the archaeological report.

The excavated tomb (Tomb 1), like many in the area, is located on the western hill slope. It consists of a vertical shaft (ca.250-300cm depth and 60-80cm in diameter) leading to a semi-circular chamber (ca.270cm in diameter) with a concave ceiling. The western tip of the chamber was artificially cut by the ongoing road works. The chamber floor was covered with an irregular earthy layer (30-50cm in depth) consisting of clay and decomposed lime stone material intercepted with a few stones of variable size. Fragments of human bones were scattered on the surface. Two main excavation loci were localized. The first was defined as Burial 1 (B1) to the east of an imaginary N-S line dividing the chamber. The second (B2) was to the west of that line (Fig. 8).

B- Osteological Analysis

The strong fragmented was dried and clean brushed. From each collection bag the fragments were sorted (cranial and post-cranial parts). In the



8. Schematic drawing of the tomb, chamber 1.

reassembling process, human remains from Tomb 1 were found to be those of three individuals: two adults and one non-adult. Skeletal fragments allocated to the adults were obtained from different loci in the burial chamber. A number of small fragments, teeth and broken hand and feet bones could not be assigned with any degree certainty to any individual: These were put together as mixed and were excluded from analysis. Human bones collected from Tomb 2 probably belong to one individual.

1- Individual 1- Tomb 1

Material: Available skeletal material is in general fragmentary and incomplete (nearly 40%). Cranial parts fragmentary, skull base, facial parts, left temporal bone and most of os occipital, mandible and teeth are all missing. Both scapulae are fragmentary and incomplete but no clavicular bone was found. From the upper extremities: caudal parts of left L. and right R. humerus present with 2/3 of R. and 3/4 of L. shaft. R. Humerus head fragmentary, only the proximal half of R. radius and ulna, olecranon of L. ulna. No hand bones. Only few fragments of the lower ribs are present. From the vertebral column only one cervical, T12 and five lumbar vertebrae (broken and incomplete). Sacrum is intact but missing coccyx. Both pelvic bones are fragmentary and incomplete. From the lower extremities L. femur missing femoral head (lost during transport!), R. femur only shaft, tibia and fibula both strongly fragmented. Most feet bones are missing. R. patella is present (see attached Human bone documentation sheets).

Sex Determination: Cranial features show high processus mastoideus, skull lateral profile, and R. orbital upper ridge suggest male. The pelvic bones sciatic notch and pubic symphysis indicate male features. Postcranial bones reveal extensive robusticity.

Age Estimation: Teeth are not available for this analysis. Cranial suture closure shows complete fusion in the S1, S2 and S3 regions of the sagittal suture, and of C1 and C3 of the coronal suture, C2 almost complete as well as available parts of L2 and L3 regions of the lambdoid suture. All these features with the pubic symphysis indicate an age well above 50 years.

Pathology: A medium stage of porosity can be observed on the outer cranial surface, particularly on the parietal parts. These are well expressed around the porus acusticus (ear) area. Around the frontal crest of the cranial wall there are multiple depressions with smooth edges. No cribra orbitale was detected on the fragment from the right orbital

part. Probable histological abnormal formation (lesions?) is found on the lateral end of the R. zygomatic arch (5-10mm) and of the temporal bone (lateral) of the same body side.

The proximal end of the left scapular spine reveals a healed fracture that lead to a moderate morphologic deformation. The left ulnar bone reveals another fracture, transverse, below the proximal epiphysis (tuberositas ulnae). The traumatic injury led to the separation of the epiphysis from the ulnar shaft. A long healing process lead to an abnormal bone growth closing the gap between the two broken parts of the ulna (pseudoarthritis), thus limiting the functionality of the L. arm. It is very possible both traumatic injuries described above, that healed long before mortality, are related or were caused by the same factor (a fall more probable).

Degenerative joint diseases were also examined. Almost all the available articulation surfaces reveal porosity of pitting or both. Osteophytosis (abnormal bone growth) can be observed on the edges of the long bones joints, patella, pelvic parts and sacrum. It is more acute in the case of the all allocated cervical, thoracic and lumber vertebrae. Osteophytes were so extensive on the lumber vertebrae. This led to ankylosis (fusion) of the L1 with L2, and L3 and L4 with L5 (Block vertebrae).

2- Individium II- Tomb 1

The material is scarce in general including fragmentary cranium missing the facial parts. No maxillar nor mandibular bones are present, though a fragment of os alare is available. The left parietal and occipital parts are strongly fragmented. Post cranial fragments include parts from L. femor, R. radius and both fibulae and tibiae as well as from the ribs and vertebrae. The material reveals less or no fossilization (hardening), compared with the material of the other individuals found in the burial (Tomb-1)

The material belongs to a non adult individuum, probably 5-10 years old as suggested by the femoral fragment and cranial suture closure. Sex determination for this individuum is macroscopically not possible.

On the outer surface of the frontal bone of the skull, two small depressions (ca.5mm in diameter) are present. These can be of pathological origin, though root intrusions or rodents bites can not be excluded.

3- Individium III- Tomb 1

The scanty material of an adult individuum consisting of most of the right squamous bone and

parts of the occipital and parietal bones. Post cranial material includes fragments of the humeral, femor, tibial shafts. Minimal and maximal humeral diameter measure 21, 18 of the right and 21, 17 for the left respectively.

The length of the mastoid process and cranial gracility suggest a female individual. The material suggests an age between 25 and 40 years.

Pathologic features observed include slight porosity around porous acusticus. The presence of a lightly expressed mastoid suture was documented.

4- Individium 1- Tomb 2

The material consists of two bone fragments only: the sternal end of the right clavicle and 3cm long rib fragment. The articulation surface of the clavicular fragment suggests an adult of 22-25 years old. No further analysis was possible.

Conclusion

This part will handle the material of Tomb-1 only. In this tomb the incomplete remains of 3 buried individuals were found: indiv.1 (NAAR-2001) is a male died probably at an age above 60 years as suggested by the age factors and the pathological features of the joints. It was probably buried at the same time or after the burial of the third individual NAAR-003 (female 25-40 years old), which is more probable. This is indicated by the poorer condition of the NAAR-003 material. Both can be dated, as suggested by the excavated pottery, to EB-IV phase. The remains of the non adult, NAAR-002, are comparatively less fossilized and deteriorated than the other two adult burials. This suggests that the child was buried at a much later period (first or second millennium AD). This assumption is strengthened by the observations made during excavations as well as the retrieval of few Byzantine pottery fragments in the tomb (pit fall).

Note: Tomb 1=(Locus 1).

NAAR= Osteo-lab Registry No.

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