

Human remains from Bakr Awa, Iraq, 2013

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Shahrizor is a valley situated north-west of the upper Diyala river in the foothills of the Zagros Mountains. Because of its location it was an important part of the interregional trade network, and played a significant role in military operations in Northern Mesopotamia (cf. Altaweel et al. 2012). The largest archaeological site in Shahrizor is Tell Bakr Awa ($35^{\circ}13'14''\text{N}$, $45^{\circ}56'26''\text{E}$) located in the southern part of the valley. Initial excavation on the tell began in 1927 under Ephraim Speiser, who was the first to propose the identification of Bakr Awa with ancient Atlila (renamed to Dur-Assur in the 9th c. BC). In the 1960s two excavation campaigns were undertaken by the Iraqi General Directorate of Antiquities. Iraqi research efforts concentrated on both the citadel and the surrounding lower town. The present research was initiated by the Directorate of Antiquities of the province Sulaimaniyah and was conducted by a German expedition directed by Prof. Peter Miglus from the Institute of Pre- and Protohistory, University of Heidelberg (Germany). In the first two excavation seasons in 2010 and 2011 the areas on top of the citadel mount (Areas 3 and 4) and in the lower town (Areas 1 and 2) were excavated. The trench in Area 2 covered and extended an old Iraqi trench. For more information about the history and results of the 2010–2011 archaeological investigations see Miglus et al. (2011, 2013).

In 2013 work at Bakr Awa continued on the top of the citadel (Area 3) and in the lower town, where one additional trench in Area 5 was opened. The human remains described in the present field report came exclusively from the Lower Town. The human remains discussed herein were examined by the author in the dig house in the village of Bakr Awa. Samples were taken for future studies and are now curated in the Department of Bioarchaeology at the University of Warsaw, Poland.

Anthropological investigation was aimed at reconstructing the demographic profile of the historical population of Bakr Awa, and preliminary investigation of the health of this past population. In order to achieve these aims human remains were examined using the standard protocols presented in Buikstra and Ubelaker (1994) in conjunction with additional methods of age assessment for subadults (Gustafson & Koch 1974; Smith 1991; Scheuer et al. 2004) and adults (Lovejoy 1985). When necessary, sex was determined using long bone dimensions (Oliver 1960). Palaeopatho-

logical conditions were identified and scored according to Steckel et al. (2011), Waldron (2009), and Ortner (2003).

In Area 1 five individuals from the Bronze Age were unearthed: two infants in individual jar burials, one juvenile, and a pregnant woman. The last burial (BA 1311) was the most interesting, because of the fact that this 25-35 year old woman was in the third trimester of pregnancy (Figure 1), she had traits of trephination (Figure 2) and hand bone fractures. The graves of the juvenile and adult woman were identified in the house containing chamber tomb BA 1108 (Miglus et al. 2011).



Figure 1. Remains of a foetus from the Bronze Age (BA1311).

In Area 2 eight individuals were indentified in burial contexts. Several bones were also identified from secondary, non-burial contexts. Only three graves were not disturbed by later human activity (e.g., Iraqi excavations, modern looting pits). Many bones were retrieved from trash and storage pits where they were mixed with animal remains (these bones are excluded from this report). Except for one burial dated to the Islamic Period, all the graves from Area 2 date to the Bronze Age. The most spectacular



Figure 2. Trepanation of the parietal bone of an adult woman from the Bronze Age (BA 1311).

grave was a chamber tomb (BA 2500) similar to the tomb BA 1108 found in Area 1 in the 2010 field season (Miglus et al. 2011). However, in contrast to BA 1108, BA 2500 was not looted. Most of the human skeletal remains were identified in a disarticulated manner, except for part of the left upper limb and a few thoracic vertebrae. At least three individuals were buried in this tomb. The oldest burial belongs to an adult individual whose remains were partly removed before burial of an adult woman. The most recent burial belongs to a juvenile individual of unknown sex.

In Area 5 the remains of six individuals were unearthed: one child, two adult males, two adult females and one adult individual of unknown sex. All of these indi-

viduals were buried in shallow, earthen graves covered by stones. These burials date to the Islamic Period. A left radius of individual BA 5030 bears traits of insect activity: radial scratches concentrating in ellipsoidal depressions (42×37mm), in few cases penetrating cortical bone (Figure 3).

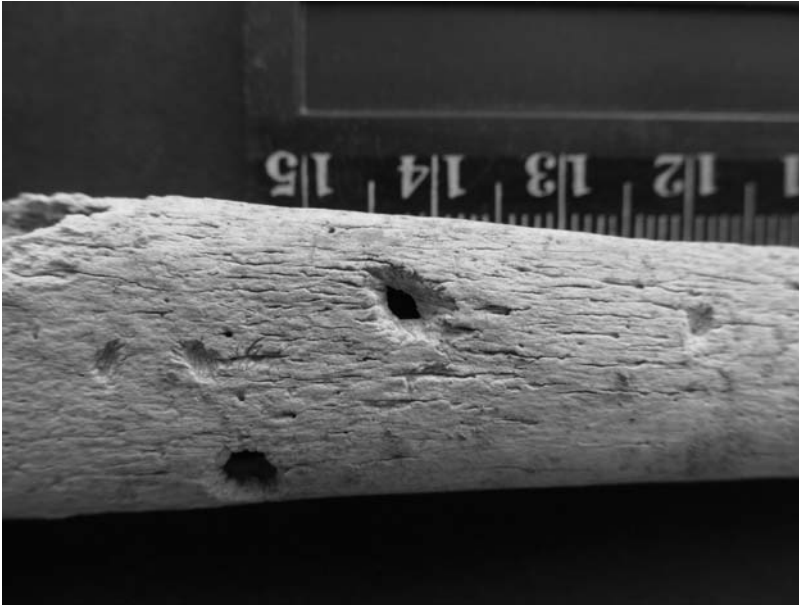


Figure 3. Signs of insect activity on the radius of an adult male from the Islamic Period (BA 5030).

Table 1. Bakr Awa: sex and age distribution for given period.

Age-at-death	Bronze Age			Islamic Period			Total
	Male	Female	Unknown	Male	Female	Unknown	
Foetus			1				1
0-0.9			3				3
1-6.9						1	1
7-13.9			1				1
14-19.9			1				1
20-29.9		1		1	2		4
30-55	1	2				1	4
Adult		1		2			3
Total	1	4	6	3	2	2	18

In the 2013 season the remains of 18 individuals were unearthed and analyzed along with some bones from non-burial contexts (Table 1). Caries was the most

frequent palaeopathological condition (8/11 individuals). In one case caries was associated with abscess. The most frequently observed stress indicator was linear enamel hypoplasia (4/10 individuals), which occurred only in Bronze Age individuals. *Cribrra orbitalia* were noted on the remains of three of the five individuals from the Islamic Period. Two individuals bear signs of upper limb fracture. Single cases of periostitis (BA5030), button osteoma (BA 2386), osteoarthritis (BA 1314), and Schmoerl's nodes (BA5081) were also observed.

Further study of this skeletal sample will include dietary reconstruction using stable isotope analyses of carbon and nitrogen, and enamel microwear pattern analysis to test the sample for possible dietary changes during the transition from the Late Bronze to the Early Iron Age.

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