Bioarchaeology of the Near East, 19:70–75 (2025)
Short fieldwork report

Human remains from Tell Rad Shaqrah, Syria, 1994–1995 (updated)

Dariusz Szeląg, Nina Maaranen, Arkadiusz Sołtysiak*
Faculty of Archaeology, University of Warsaw,
ul. Krakowskie Przedmieście 26/28, 00-927 Warszawa, Poland
e-mail: a.soltysiak@uw.edu.pl (corresponding author)

Tell Rad Shaqrah is a small archaeological site located c. 20km south of Hasseke near the bank of the Khabur River, close to the Hasseke South dam area (36°28'04"N, 40°49'57"E) (**Figure 1**). During rescue excavations carried out between 1991–1995 by a University of Warsaw team directed by Piotr Bieliński, five trenches were explored around the site, mainly on the slopes of the tell (**Figure 2**). These excavations revealed the remains of a fortified settlement occupied during the Early Bronze Age (EBA) (second half of the 3rd millennium BC; Early Jezirah 3–4 periods) with traces of later, Iron Age (Neo-Assyrian) occupation.

The excavations yielded 41 graves from the 3rd millennium BC, mainly of subadult individuals buried in domestic contexts. Only six adult burials were found, five of

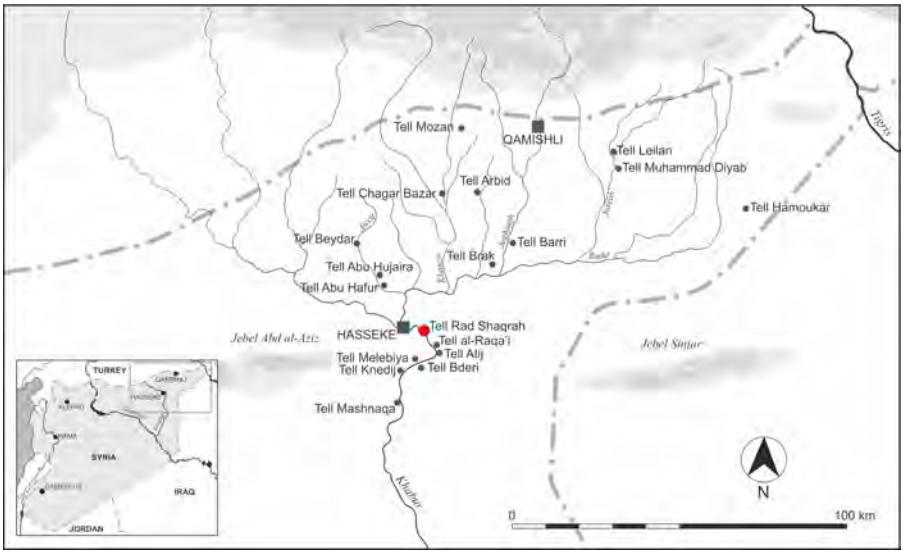

Figure 1. Map showing the location of Tell Rad Shaqrah among the other Early Bronze Age sites in the Khabur River basin. Drawing by Marta Momot.

https://doi.org/10.47888/bne-1907

them simple pit graves and one mudbrick cist (Grave 7, see **Table 1**). All adult pit graves were dug into the stone glacis of the defensive wall surrounding the settlement. The small number of adult burials indicates that people in this age group were buried outside the site (Szeląg 2014; Wygnańska et al. in press).

Selected teeth and bone fragments unearthed during the two last excavation seasons at the site were transported to Poland for analysis, and a relatively extensive report has already been published (Sołtysiak 2003). However, the details of the archaeological context were lacking; the current update fills this gap and adds several additional observations on dental non-metric traits.

After combining the available fieldwork documentation, the number of individuals decreased from 16 to 15 or even 14 if two jars in Grave 20 contained remains of the same infant (the size of the elements was comparable and no overlapping elements were identified). Subadult individuals were commonly buried in cist graves made of

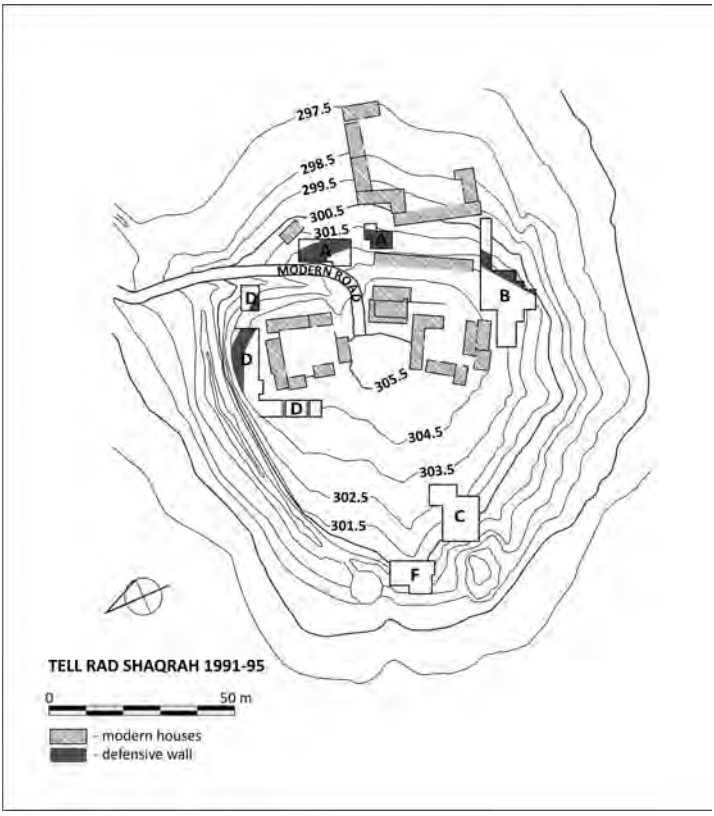

Figure 2. Contour plan of Tell Rad Shaqrah showing the location of excavated areas. Drawing by A. Schneider, digitised by M. Wagner.

Table 1. Updated catalogue of human remains from Tell Rad Shaqrah.

Tr.	Year	Grave[1]	No.[2]	Age[3]	Grave type	Orientation	Grave goods
B	1994	31	1	2	mudbrick cist	NE-SW, left side	beads, toggle pin, one vessel
B	1994	14	2	2	mudbrick cist		beads, small vessels
B	1994	14	3	5-6	one tooth, intrusive?		
C	1994	16	4	0.75	mudbrick cist	NE-SW, right side	beads, pendants, small vessels
C	1995	21	5	4	mudbrick cist	NE-SW, left side	beads, ornaments, small vessels
C	1994	20	6+7	4/5	mudbrick cist	NE-SW, left side	beads, pendants, vessels
C	1994	20	14	infant	jar in a stone cist		
C	1994	20	15	infant	jar in a stone cist[4]		
C	1994	37	8	fetus	jar in a mudbrick cist	no data	one shell
C	1995	38	16	fetus	pit grave	no data	none
C?	1995?	?	12	infant	no data	do data	none
D	1995	33	9	3	mudbrick cist	roughly NE-SW	beads, pendants, vessels
D	1994	36	13	fetus	destroyed grave?	no data	none
F	1995	18	10	0.75	mudbrick cist	E-W, left side	beads, small vessels
F	1995	7	11	adult	pit grave	NW-SE, left side	two vessels

[1] Grave numbers according to the fieldwork catalogue by Dariusz Szeląg.
[2] Assemblage numbers after Sołtysiak 2003.
[3] Median dental age-at-death, for ranges see AlQahtani et al. 2010.
[4] It is possible that elements from one skeleton were placed in two different jars.

Table 2. Number of teeth sufficiently preserved for analysis (three permanent teeth were identified only as premolars), sides grouped. Lower cases indicate deciduous dentition, upper cases permanent dentition.

Upper								Lower							
			dm2	dm1	duc	dui2	dui1	dli1	dli2	dlc	dlm1	dlm2			
			10	8	10	8	12	7	5	8	5	6			
UM3	UM2	UM1	UP2	UP1	UC	UI2	UI1	LI1	LI2	LC	LP1	LP2	LM1	LM2	LM3
1?	2	12	1	2	4	5	8	5	8	8	2	3	10	4	3

brick (15 graves) or stone (three graves). Some skeletal elements were also retrieved from jars; however, only one case (the fetus from Grave 37) appears to be a primary burial. The other fetus was buried in a small grave pit dug under the floor in one of the rooms of an EBA building (**Table 1**). The vast majority of fetal and newborn skeletons found at the site were buried in kitchenware (cooking) pots (8 burials) placed under house floors, usually in room corners. These burials usually lacked grave goods; only in two cases was a small jug found inside a large kitchenware pot, and in one case a small bone ring accompanied the buried individual (Szeląg 2014:150; Wygnańska et al. in press).

In contrast, burials in cist graves yielded a rich and diverse collection of grave goods. Besides vessels (ranging from one to eight per grave), there were beads of various forms made of various local and imported raw materials (several types of stone, shell, and vitreous paste), pendants (mostly zoomorphic), and metal ornaments (toggle pins, hair rings, and bracelets) (Wygnańska et al. in press). Particularly rich sets of

grave goods were recovered from the most elaborate graves—namely, the three stone cists (Graves 19, 20, 21, see **Table 1**). These graves contained pottery vessels, bronze items, a lead plaquette, stone and shell pendants, and a vast amount of beads (over 400 in Grave 19, 140 in Grave 20, and 232 in Grave 21) (Szeląg 2014:156–157).

A total of 160 teeth were sufficiently preserved to be recoded at the University of Warsaw (**Table 2**); from these 81 were permanent teeth out of which 73 exhibited at least one recordable dental non-metric trait (DNMT). DNMTs are discrete and macroscopically visible features on the tooth crowns and roots which can provide insights into ancestry and kinship. While DNMTs are hereditary and have been shown

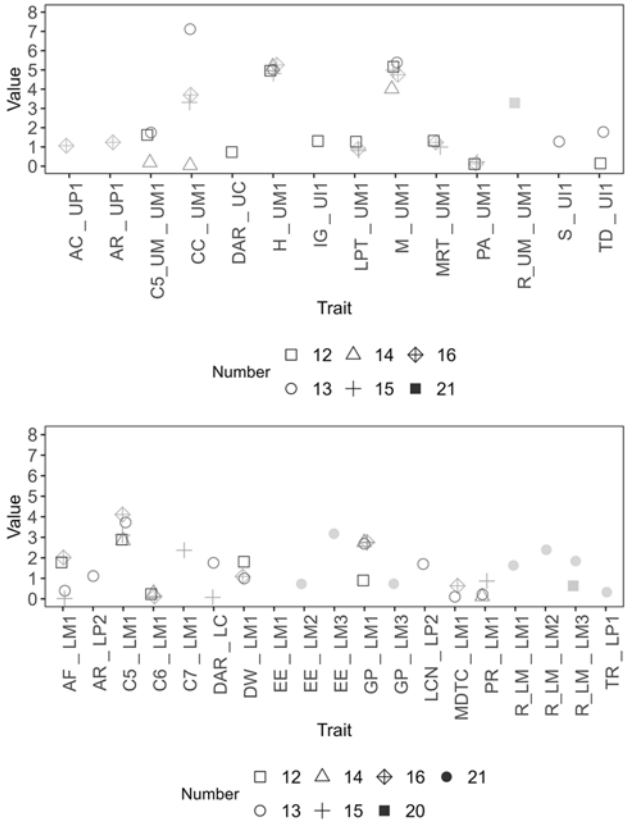

Figure 3. Dental non-metric trait scores from different contexts. Numbers match the catalogue from Sołtysiak 2003. Abbreviations indicate trait (first part) and tooth (second part): accessory cusp (AC), accessory ridge (AR), cusp 5 (upper and lower; C5U and C5L), distal accessory ridge (DAR), hypocone size (H), interruption groove (IG), lingual paracone tubercle (LPT), metacone size (M), marginal ridge tubercles (MRT), parastyle (PA), root number (RU, RL), shoveling (S), tuberculum dentale (TD), anterior fovea (AF), cusp 6 (C6), cusp 7 (C7), deflecting wrinkle (DW), enamel extension (EE), groove pattern (GP, x=1, +=2, y=3), lingual cusp number (LCN), mesial and distal trigonid crest (MDTC), protostyle (PR), and Tome's root (TR).

to produce similar group distances as DNA analysis (Hubbard et al. 2025, Delgado et al. 2019), they are also influenced by epigenetic and environmental conditions (Khalaf et al. 2022).

DNMTs were recorded using the Arizona State University Anthropology System (ASUDAS), following the scoring guidelines by Scott and Irish (2017). One additional trait, lingual paracone tubercle was recorded as a curiosity—this small tubercle, visible distally from the marginal ridge tubercles, can only be recorded when dental wear is minimal. While it has not been generally recorded, it has been observed at other sites in the ancient Near East (Maaranen 2024).

Although statistical analysis is not advisable for such a small sample, a selection of traits was plotted for visual inspection (**Figure 3**). Most traits exhibit similar clustering

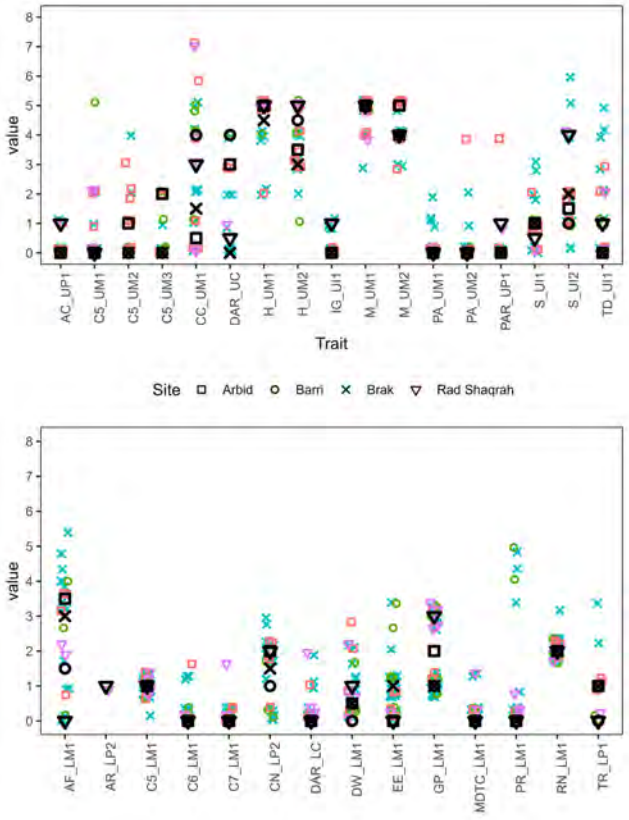

Figure 4. Dental non-metric trait scores across different sites in the Khabur basin. Black shapes indicate score medians. Note that in some cases the median can be based on n=1. Abbreviations same as **Figure 3**. Comparative data from Maaranen et al. 2024.

patterns, with the exception of Carabelli's cusp (CC UM1). Overall, the observed trait frequencies fall within the range of broader regional variation (**Figure 4**).

References

AlQahtani S.J., Hector M.P., Liversidge H.M. (2010), *The London atlas of human tooth development and eruption*, American Journal of Physical Anthropology 142(3):481-490.

Delgado M., Ramirez L.M., Adhikari K., Fuentes-Guajardo M., Zanolli C., Gonzalez-Jose R., Canizales S., Bortolini M.C., Poletti G., Gallo C., Rothhammer F., Bedoya G., Ruiz-Linares A. (2019), *Variation in dental morphology and inference of continental ancestry in admixed Latin Americans*, American Journal of Physical Anthropology 168(3):438-447.

Hubbard A.R., Guatelli-Steinberg D., Irish J.D. (2015), *Do nuclear DNA and dental nonmetric data produce similar reconstructions of regional population history? An example from modern coastal Kenya*, American Journal of Physical Anthropology 157(2):295-304.

Khalaf K., Brook A.H., Smith R.N. (2022), *Genetic, epigenetic and environmental factors influence the phenotype of tooth number, size and shape: Anterior maxillary supernumeraries and the morphology of mandibular incisors*, Genes 13(12):e2232.

Maaranen N. (2024), *A brief note on the frequency of maxillary molar cuspules in Southwest Asia*, Bioarchaeology of the Near East 18:25-37.

Maaranen N., Walker J., Sołtysiak A. (2024), *Early Bronze Age population substructure in the Khabur basin: Preliminary evidence from Tell Brak, Tell Arbid and Tell Barri (Syria)*, Anthropologica et Praehistorica 132:63-80.

Scott G.R., Irish J.D. (2017), *Human tooth crown and root morphology: The Arizona State University Dental Anthropology System*, Cambridge: Cambridge University Press.

Sołtysiak A. (2003), *Tell Rad Shaqra (Syria), seasons 1994–1995*, Studies in Historical Anthropology 3:138-149.

Szeląg D. (2014), *Amulets? On the possible function of zoomorphic pendants from child burials in Tell Rad Shaqrah (Syria)*, Polish Archaeology in the Mediterranean 23(2): 145-160.

Wygnańska Z., Smogorzewska A., Szeląg D. (in press), *New insights into ancient childhood: Third millennium BC (EJZ 3) child burials from Tell Rad Shaqrah in North-Eastern Syria* [in:] "*Tu nunc laurus Agamemnonias accipe victor*. A Festschrift in honour of Kazimierz Lewartowski", A. Ulanowska, S. Aulsebrook, K. Żebrowska, A. Dzbyński, D. Szeląg (eds.), Turnhout: Brepols.