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Human remains from Haji Khan Tepe, Iran, 2017

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Haji Khan Tepe $(35^{\circ}01'58''N, 49^{\circ}01'17''E, 1613masl)$ is a small archaeological site covering $75 \times 65m$, located near the village of Zaraqan in Hamedan province, not far away from Ghare-chai river. Heavily destroyed by recent bulldozing and by illegal excavations, the site was discovered by Motarjim et al. (2009) during a regional survey. At present, the maximum height of the cultural strata is c. 4m. Due to the construction of Ibn Sina Petrochemical Context at this place, rescue archaeological excavations in four areas were undertaken at the site in the winter of 2016 and spring of 2017 under the direction of Esmail Hemati Azandaryani (**Figure 1**). In the largest area, Area A, architectural remains have been found, which have been interpreted as a temple dated to the Iron Age III (i.e. the Median period) (Hemati Azandaryani 2017).



Figure 1. Haji Khan Tepe during excavations. Photograph by E. Hemati Azandaryani.



Figure 2. Human burial in Square EF34a. Photograph by E. Hemati Azandaryani.



Figure 3. Porosity on calcanei of the individual from Square EF34a. Scale bar 1cm. Photograph by A. Sołtysiak.



Figure 4. Pseudoarthrosis of the lumbar spinous process, EF 34a loc. 118. Scale bar 1cm. Photograph by A. Sołtysiak.



Figure 5. Cutmarks at proximal femur, GH 34 loc. 104. Scale bar 1cm. Photograph by A. Sołtysiak.

Only one complete burial has been unearthed at the site (Area A, Square EF34a). It was a simple pit grave measuring 170×70 cm with no artifacts, dating most likely to the Islamic period (**Figure 2**). The skeleton was fairly complete and relatively well preserved. Although the pelvis was eroded, general bone robustness suggests that it

was a male individual, with femoral midshaft circumference being 90.5mm and tibia circumference at the nutrient foramen 94mm (see Sołtysiak 2010), although both humeri were surprisingly gracile (21.7×16.9 mm at midshaft) and both had septal apertures, which is more common in females (Mays 2008). There was no degenerative joint disease, the teeth were slightly worn and the pubic symphysis retained some ridges and furrows (grade 2, Brooks & Suchey 1990), indicating a young adult. The mandible was missing and there were no dental caries in the preserved upper dentition (0/7). The femoral midshafts of this individual were clearly asymmetrical, with the left one being more robust than the right and *linea aspera* more prominent (8.4mm versus 7.3 at midshaft). There were bilateral areas of porosity between the peroneal tubercle and the posterior facet (**Figure 3**).

Apart of this complete skeleton, many disarticulated human elements have been found in several loci (**Table 1**) and it is likely that this scatter represents skeletons from Islamic graves that were destroyed during illegal excavations and construction works. Both male and female bones are present, but there are no subadult elements. Some fragments were strongly eroded and black staining was relatively common. Two cases of trauma were present in this small assemblage: a healed fracture at the proximal end of the left first metacarpal in EF 34 loc. 101 and a post-traumatic pseudoarthrosis at the lumbar spinous process in EF 34a loc. 118 (Figure 4). A case of sacralized lumbar vertebra was noted in EF 34b loc. 104. On several elements (i.e. the scapula under glenoid in EF 34 loc. 101; the ilium in EF 34b loc. 118; the proximal and distal left femur in GH 34 loc. 104) cutmarks were present, likely being left by tools used during illegal excavations (Figure 5).

Trench	Locus	MNI	Sex	Age-at-death	Elements
CD 34	101	1	?	adult	a few fragments from different body parts
CD	107	1	F*	adult	right femur
CD	111	1	F*	adolescent	humerus + vertebrae + metatarsals
CD 34	125	1	?	adult	patella + rib + atlas
EF 34	101	1	M**	adult	a few fragments from upper part of the body
EF 34a	118	1	?	young adult	a few elements from various body parts
EF 34b		1	F*	adult	right femur
EF 34b	101	2	F*	adult	left femur + thoracic vertebra + a rib
			M**	adult	clavicle + metacarpal + humerus + ribs
EF 34b	102	2	M**	adult	right radius
			F**	adult	a few elements from various body parts
EF 34b	104	1	M**	adult	sacrum + a few other elements
EF 34b	118	1	?	adult	ulna + humerus + ilium + a rib
GH 34	104	1	F*	adult	femur
PC		1	M*	40-45	pelvis + vertebrae + radii + ulna

Table 1. Disarticulated human elements retrieved at Haji Khan Tepe.

References

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