

Preliminary Report of Thamuniak Broze (Chitral) Excavation 2023

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Abstract: Recent archaeological excavation carried out at Thamuniak Broze, a village located 20 km to the south of Chitral Town has revealed important archaeological and biological remains. The Iron Age Cemetery of Thamuniak is located to the right side of Dir-Chitral Road and is positioned on the ridge of a mound overlooking Seenkulum, (a small village located to the left side of the road) and the Chitral River. This site was reported for the first time by Giorgio Stacul in 1968 (Stacul 1969). In 2022, a team of archaeologists led by the senior author visited the village and reconfirmed the existence of Iron Age cemetery.

In 2023, the first systematic excavation at the site was carried out by Hazara University Mansehra under the directions of the principal author. A preliminary report of the excavated site is presented here.

Keywords: Iron Age Cemetery, Chitral, Thamuniak Broze.

Introduction

The Iron Age cemeteries are widespread in Chitral valley. These cemeteries, characterized by their orientations and the presence of archaeological artefacts (grave goods) buried along with the deceased, are found both in the lower valleys and at high altitude along the mountain passes. More than 30 such cemeteries have been explored from the Upper and Lower Chitral during the archaeological surveys carried out by different individuals and institutions (Khan 2002; Ali et al. 2005; Zahir 2012; Samad et al. 2012; Zahir 2016 and 2018). Of these, *Parwak* (Upper Chitral) and *Gankoriniotek*, *Shamiran Deh* and *Chakast* (Lower Chitral) have been systematically excavated (Ali and Zahir 2005; Ali et al. 2008; Ali et al. 2010; Brain et al. 2017; Zahir 2016, 2018 and 2022; Hameed et al. 2022). One such cemetery is located in Thamuniak Broze, a village lies about 20 km to the south of Chitral Town (Fig. 1). It was reported by Giorgio Stacul in 1968 along with *Bakamak*, *Noghormuri*, *Bala Hisar* cemeteries (Stacul 1969: fig.1; Hadiqa and Hameed 2023).

The term “Gandhara Grave Culture” was first coined by Ahmad Hassan Dani based on the initial geographic distributions of these graves in 1960s. Later, the discovery of similar graves outside

the geographical boundaries of Gandhara by the Italian archaeological mission led to the creation of a new term “The Protohistoric Graves”, which has been used side by side along with the earlier one. However, based on stratigraphical evidence and typology, these cemeteries have been assigned to three phases (Stacul 1966). Of these, the first phase is placed between 1400 and 1100 BCE (late Bronze Age). The second phase between 1100 and 700 BCE (early Iron Age), and the third phase between 700 and 400 BCE (middle-late Iron Age) (Vidale et al. 2012; Müller-Karpe 1983; Vinogradova 2001).

Radiocarbon dates of human skeletal remains from Gankoriniotek and Shamiran Deh, Singoor, Lower Chitral and Parwak, Upper Chitral have confirmed the emergence of this burial tradition in Chitral not earlier than the 10th century BCE. The earliest graves at Gankoriniotek fall under the Iron Age (1000-500 BCE). Based on the radiocarbon dates, the term “Iron Age Cemeteries” has been proposed by Abdul Hameed, as an alternate term for these burials from Chitral Valley (Hameed et al. 2022). Recent discovery of early Iron Age rock carvings from Kushum, Upper Chitral has also attested the existence of human population in Chitral valley during the early Iron Age.

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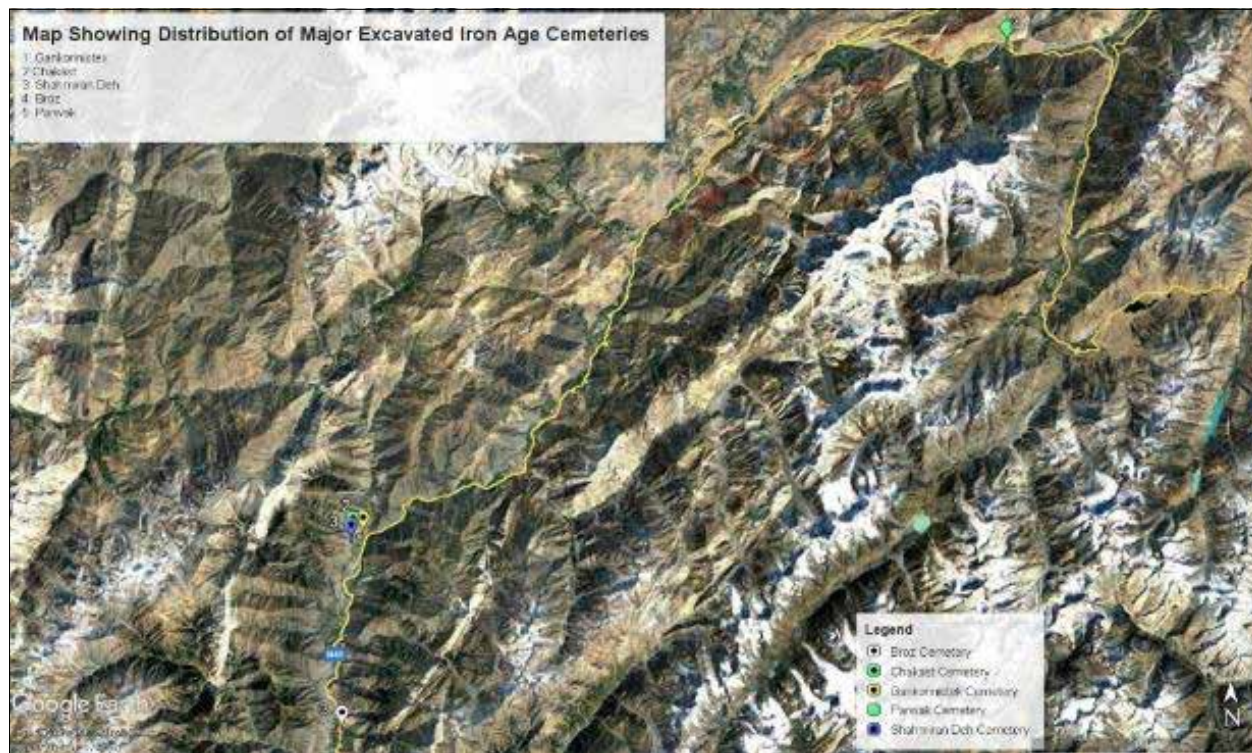


Figure 1. Map Showing Distribution of Iron Age Cemeteries (excavated) in Chitral Valley

Located on the right side of Dir-Chitral Road, the Iron Age cemetery of Thamuniak Broze lies between $35^{\circ} 75'29.98$ north latitude and $71^{\circ} 87'48.55$ east longitude. In 2022, the site was revisited by the principal author to reconfirm its existence and feasibility for excavation. During this visit, some of the ancient graves were found protruding from the ground and were partially preserved (Fig. 2). The site was selected for a rescue excavation to document the archaeological remains and collect bone samples for aDNA (ancient Deoxyribonucleic Acid) analyses.

In 2023, the first systematic excavation at the site was carried out by a team of archaeologists led by the principal author. After gridding and initial documentation of the surface features, trench B/7 and B/8 near the norther edge of the mound were selected for excavation where a cist grave was partially exposed protruding from the ground (Fig. 3). A total of 9 graves were exposed during the current excavation. A brief description of these graves is presented here:

Description of the Graves

Grave 1: Grave-1 at Thamuniak Broze was exposed at a depth of 30 cm below the surface in trench B/8 and baulk between trenches A/8 and B/8 (Fig. 4). It was oriented in north south direction. As already mentioned, this grave was partially uncovered due to erosion and water activities. The grave measured 155 cm in length and 70cm in width and had a maximum depth of 47 cm below the surface. It was made of stone slabs horizontally sunk in the ground with their edges joined in the form of cist. The stone slabs on the southern, western and eastern sides were supported by a single row of rough stones and mud was used for binding purposes. While the stone slab(s) on the northern side of the grave along with capstone(s) were found missing due to erosion. The floor of the grave was paved with a large flat stone slab (Fig. 5). This grave revealed 18 steatite beads, two corroded iron nails and an iron knife blade along with fragments of human skeleton including teeth in a very precarious state of preservation.



Figure 2. Map showing the location of Iron Age Cemetery at Thamuniak Broze



Figure 3. Map showing major areas selected for excavation in 2023



Figure 4. Grave 1 exposed at Thamuniak Broze

Grave 2: The second grave at Thamuniak Broze cemetery was exposed in trench B/7 (Fig. 6). It was surrounded by a single row of stone walls. The grave measured 170 cm in length, 78 in width and had a depth of 90 cm. Unlike grave -, it was constructed of rough stone pebbles bounded with mud. The grave was sealed with stone slabs vertically placed. However, due to water activities, the skeletal remains were found to have completely perished. No archaeological remains were found from this grave.

Grave 3: Grave-3 at Thamuniak site was exposed on the southeastern corner of B/7. This grave measured 80 x 40 cm and contained a child burial placed in north south direction while head on the northern side, facing towards west. It was a simple pit with no stone walls or slabs and was sealed by placing stone slabs vertically (Fig. 7). The orientation of the grave and the skeleton confirmed that it was a Muslim grave. It was closed and sealed again.



Figure 5. Close-up view of Grave 1 after excavation



Figure 6. Photographs showing Grave 2 at Thamuniak Broze before, during and after excavation



Figure 7. Grave 3 at Thamuniak Broze reveals a child burial

Grave 4: A bi-chamber grave (Fig. 8) exposed on the southwestern corner of trench B/7. The upper chamber of the grave was formed by placing stones vertically into the ground with their edges joined in the form of a cist (Fig. 9). This chamber measured 90x60 cm. Capstone of the upper chamber was found missing due to erosion and water activities.

No archaeological and biological remains unearthed from the upper chamber. The lower chamber of grave 4 was found sealed by placing stone slabs vertically. The lower chamber was a simple pit measuring 58x32 cm. It accommodated a child burial placed in north south direction with head towards north facing west. No archaeological remains were found from this grave. The grave was refilled after confirmation to be a Muslim grave.

Grave 5: Grave-5 was exposed on northwestern corner of B/7 (Fig. 10). It was partially exposed and after confirming the orientation of the skeleton it was sealed again. Like Grave-3 and 4, it was also a sepulchral niche covered with stone slabs accommodated with a single burial (the best-preserved skeleton found at the site) placed in the north south direction with head towards north facing west. The construction of these

graves was very unusual as they neither resemble to the Iron Age graves nor to the modern Muslim graves. Even the local population of Thamuniak do not claim any ancestral connections with these burials. Bone (teeth) samples were collected from this individual for aDNA analysis and radiocarbon dating that yielded sufficient DNA and is assigned to the 18th-19th century.

Grave 6: Grave-6 was exposed on the northern side of grave-3 in B/7. It was very similar to grave 3 in terms of size and architecture. This grave was partially excavated and closed after confirmation that it had already been disturbed by the local population. A modern plastic bag full of human hair was found during the excavation (Fig. 11).

Grave 7: Grave-7 was exposed in B/7 between grave-3 and 2. It had north south orientation and had close resemblance with grave-3 and 6 (Fig. 12).

After unsatisfactory results from B/7 and B/8, we decided to move further south and selected four trenches, i.e. L/5, L/6 and M/5 and M/6, all located between the house of Mr. Iltaf Ur Rahman and (under construction house) Mr. Ihsan Ul Haq for excavation. Our excavation in this area gave very productive results in terms of archaeological and biological remains. Excavation at this area



Figure 8. Lower Chamber of Grave 4 at Thamuniak Broze revealed child burial



Figure 9. Upper (empty) Chamber of Grave 4 at Thamuniak after excavation



Figure 10. General views of Grave 5 at Thamuniak Broze before, during and after excavation

revealed two large graves with humans and animals remains along with hundreds of antiquities including terracotta pots, stone and copper beads, copper mirrors, arrowheads and nails, a stone sharpener and iron rods and nails. A detailed description of these graves (8-9 and 10) is given below.

Grave 8-9: Grave-8 was initially exposed in L/6 between the house (under construction) of Mr. Ihsan Ul Haq and the small irrigation stream to the south of the said house. Mr. Ihsan Ul Haq also claimed to have found Iron Age graves during the construction at the site, which according to him had revealed skeletal remains and grave goods including copper nails (Ihsan-Ul-Haq personal communication July 18, 2023). Grave-8, initially revealed in L/6 was further extended towards south. The northern and eastern sides of the grave were first exposed, revealing fragments of four animals' skeletons along with 5 terracotta pots and a small jar. Some of these bowls contained bone fragments and might have contained food as offering. The western side of the grave revealed fragmentary remains of human skeleton in inflexed position. The human skeleton was placed in the north south direction with its head towards

the south. This was initially thought to have been another grave thus, marked as Grave-9. But further excavation at this area it was confirmed that it was a single large grave accommodating a human skeleton buried with four animals and offerings (Fig. 13). The grave was partially disturbed by agricultural activities and roots of the trees. This large grave was constructed of stones in rubble masonry. The northern, eastern and southern walls of the graves were exposed at different depths below the surface. While the western wall was badly disturbed by the roots of the trees.

Grave 8-9 measured 200x85 cm and had a depth of 57 cm. Among the archaeological artefacts found from grave 8-9, six terracotta pots, copper beads, nails and arrowheads, Iron knife blade with stone sharpener and carnelian and ivory beads are worth mentioning.

Grave 10: Grave-10 exposed at Thamuniak cemetery (Fig. 13) was oriented in north south direction. It was constructed of stones in rubble masonry. The grave measured 210 cm in length and 64 cm in width and had a depth of 45 cm. It accommodated a single inflexed burial placed in north south position with head towards south. The



Figure 11. Photographs of Grave 6 taken before, during and after excavation



Figure 12. General view of Grave-7 at Thamuniak Broze overlooking north

southern wall of the grave was found missing. The human skeleton from this grave was also found in scrappy condition due to the roots of the trees. Like Grave 8-9, Grave-10 also revealed animals' bones including teeth on the northern and eastern sides. Grave-10 was the richest one in terms of archaeological remains. It revealed copper mirrors, nails, beads, iron nails and carnelian beads.

Artefacts (grave goods) unearthed from Thamuniak Cemetery

Excavation at the Iron Age Cemetery Thamuniak Broze unearthed an important archaeological assemblage, comprising stone, copper, iron and terracotta objects buried with the deceased. Table-1 is a list of the artefacts reported from Thamuniak cemetery with a description, location, photographs and other contextual information.








Figure 12. Graves 8-9 at Thamuniak Broze revealing inflexed burial with animals' bones and ritual objects













Figure 13. Grave 10 at Thamuniak Broze revealing an inflexed burial with animal bones and archaeological artefact




Table 1. List of the archaeological finds from Thamuniak Broze Excavation 2023




Reg. No.	Trench	Layer	Object	Material	3 DM/ Grave No	Description	Condition	Photograph
TMBC-001	Baulk between A/7 and B/7	3	Nail	Iron	Grave 1	Nail with Pyramidal head	Rusted and corroded	
TMBC-002	Baulk between A/7 and B/7	3	Knife Blade	Iron	Grave 1	Knife blade with sharp cutting edge and pointed tip	Rusted and corroded	
TMBC-003	Baulk between A/7 and B/7	3	Beads	Stone?	Grave 1	20 Round beads, thirteen are in black colour and remaining seven in pinkish	Good	
TMBC-004	Baulk between A/7 and B/7	3	Nail	Iron	Grave 1	Tapering nail with head slightly chipped off	Rusted and corroded	
TMBC-005	M/6	3	Pot	Terracotta	W: 230 x N: 50 x Depth: 77cm below the surface Graves 8-9	Handled pot with everted rim, handle is elegantly decorated with zig zag lines	Rim partially broken	





TMBC-006	M/6	3	Earring	Copper	Graves 8-9	Round earring	Rusted and fragile	
TMBC-007	M/5	2	Nail	Copper	W: 150 x N: 5 x Depth: 15 cm Grave 2	Large nail with broad head, slightly bent in the middle	Rusted	
TMBC-08	M/5	2	Nail	Copper	Grave 10	Nail with broad domical head	Rusted	
TMBC-009	M/5	2	Nail	Copper	Grave 10	Nail with broad domical head, head was broken and rejoined with UHU	Rusted	
TMBC-010	M/6	3	Knife Blade	Copper	N: 20 x W: 140 x Depth: 70 cm below surface of Graves 8-9	Knife blade with nail on one side for fixing handle	Rusted	
TMBC-011	M/6	3	Sharpener	Stone	N: 20 x W: 142 x Depth: 72 cm below surface Graves 8-9	Knife sharpener with a hole at one end	Good	

TMBC-012	G/13	3	Knife Blade	Iron	N: 0.5 x E: 200 x Depth: 45 cm below surface	Knife Blade	Rusted and corroded	
TMBC-013	M/5	3	Pot	Terracotta	N: 0.5 x E: 202 x Depth: 37 cm below surface of Grave 10	Pot with round base, rim badly damaged	Fragile	
TMBC-014	M/5	3	Beads	Carnelian	E: 187 x N: 68 Depth: 120 cm below surface of Grave 10	Small barrel shaped beads the larger one is dark red and broken from one side and the medium one is in pinkish colour	Good	
TMBC-015	M/5	3	Beads?	Copper	E: 185 x N: 65 Depth: 119 cm below surface of Grave 10	Four beads, large hole is made by overlapping the two sides. The largest one measures 6.3 x 1 cm, while the smallest is 1 x 0.4 cm in size	Rusted and broken	
TMBC-016	M/5	3	Bead	Copper	Grave 10	Three round beads with thin sections	Corroded	
TMBC-017	M/5	3	Button	Copper	Grave 10 found beneath the skull	Five round buttons in uniform shape	Rusted	

TMBC-018	M/5	3	Bead	Copper	Grave 10 found beneath the skull	Bell shaped round bead with a long bail	Rusted	
TMBC-019	M/6	3	Bead	Carnelian	Found attached with human jaw in Graves 8-9	Spherical bead, red colour	Good	
TMBC-020	M/6	3	Bead	Stone?	Grave 8-9 found attached to the human jaw	Cylindrical bead with curved ends, greyish colour	Well-preserved	
TMBC-021	M/5	3	Miscellaneous Object	Copper	Grave 10	Thin round beaten sheet with two holes probably used as dress ornament	Rusted	

TMBC-022	M/5	3	Mirror	Copper	Grave 10	Round mirror with a short handle	Rusted	
TMBC-023	L/6	3	Miscellaneous	Copper	Grave 10	Thin circular beaten sheet with ornamented border probably used as dress ornament	Rusted	
TMBC-024	L/5 and M/5	3	Mirror	Copper	Grave 10	Round mirror with a short handle	Rusted	

TMBC-025	L/5 and M/5	3	Mirror	Copper	Grave 10	Round mirror with a short triangular handle	Rusted	
TMBC-026	L/5 and M/5	3	Mirror	Copper	Grave 10	Round mirror with a short triangular handle	Rusted	
TMBC-027	L/5 and M/5	3	Mirror	Copper	Grave 10	Round mirror with a long handle	Rusted	

TMBC-028	L/5 and M/5	3	Mirror	Copper	Grave 10	Round mirror with a barred handle	Rusted	
TMBC-029	L/5 and M/5	3	Mirror	Copper	Grave 10	Round mirror with ornamented handle	Rusted	
TMBC-030	L/5 and M/5	3	Miscellaneous Object	Copper	Grave 10	Thin round beaten sheet probably used as dress ornament	Rusted	
TMBC-031	L/5 and M/5	3	Nail	Copper	Grave 10	Long nail with broad domical head, bent from the pointed end	Rusted	

TMBC-032	L/5 and M/5	3	Nail	Copper	Grave 10	Long nail with conical head	Rusted	
TMBC-033	L/5 and M/5	3	Nail	Copper	Grave 10	Long nail with conical head	Rusted	
TMBC-034	L/5 and M/5	3	Beads	Copper	Grave 10	Four large cylindrical beads of various sizes	Rusted	
TMBC-035	L/5 and M/5	3	Buttons	Copper	Grave 10	Three round buttons with hook on the inner side for stringing	Rusted	
TMBC-036	L/5 and M/5	3	Arrowheads	Copper	Grave 10	Two arrowheads with hallowed tang, one is partly broken	Rusted	
TMBC-037	L/5 and M/5	3	Beads and spacers	Copper	Grave 10	A necklace of fifty-five tubular beads and six spacer beads attached with hooks	Rusted	

Discussion and Conclusion

Our recent excavation at Thamuniak Broze in Lower Chitral has brought to light materials remains of archaeological and biological significance. Based on the preliminary report of Stacul (1969), the Iron Age cemetery of Thamuniak Broze along with two other Iron Age cemeteries, was selected for excavation and included in the project proposal submitted to the Higher Education Commission of Pakistan for funding under the National Research Program for Universities (NRPU). After the approval of the research project titled "Archaeological Excavation at the Iron Age Cemeteries in District Chitral" by the HEC, the first season field work (2021) was carried out at Gankoriniotek. It is an Iron Age cemetery located at the confluence of Mastuj and Lotkoh rivers in village Singoor. In 2022, we visited the Thamuniak Broze to locate the Iron Age Cemetery and ensure whether the site was feasible for excavation or had disappeared due to modern construction and agricultural activities.

During this pre-excavation's exploration, the remains of the Iron Age burials were found partially exposed on the southern edge of the mound. After confirmation, the first systematic excavation at Thamuniak was carried out in June-September 2023 with the aim to systematically document whatever was left at the site and to collect bone samples for aDNA analysis. After the initial documentation of the surface features, two trenched B/7 and B/8 were selected for excavation. A total of seven graves were exposed on the northern edge of the cemetery. Of these, only one (Grave 1) contained Iron Age burials, while the remaining six (Graves 2-7) were refilled after confirming their association with the Muslim population of an unknown era. It was not possible to continue our excavation at this side as the ancient graves were overlapped by the Muslim graves, thus, the excavation was shifted to the southern side of the cemetery, where two important Iron Age burials were revealed along with archaeological artefacts (Grave-goods).

Scientific procedures were carried for collecting the aDNA samples from different graves. Every team member (Archaeologist/ Field Officer) was instructed to work in the respective grave assigned

to him and use all possible measures to minimize the risk of contamination. The use of cap, gloves and masks was ensured. The excavation tools used by the team members were regularly cleaned and disinfected with ethanol and bleach chemicals. The skeletal remains were cautiously removed to avoid damage to the bones. After removal, the bones were taken to the camp and carefully cleaned by following the same measures to avoid any contamination. Each of the skeletal remains was carefully packed using polyethene bags and plastic boxes and were labeled properly.

Apart from biological remains, the archaeological features including graves and artefacts were also recorded in situ in the form of detailed photographs and scaled drawings. Each grave was allotted a specific number and its form designed for comprehensive recording was used for detailed certification. The artefacts unearthed were initially recorded using object cards. Photographs of the objects were taken before and after cleaning. A detailed catalogue of the artefacts was prepared which is given in Table 1.

The archaeological artefacts reported from Thamuniak cemetery Broze, based on their function, may be classified into two major categories: (a) the ritual objects and (b) personal belongings of the deceased. Of these, the artefacts of category-a include terracotta bowls fired in low temperature were found on the southeastern corner of graves 9 and 10. These bowls were placed as accompanying offers. One of the terracotta bowls from grave 9 contained fragile bone fragments. While the artefacts of category-b comprise beads (made of copper, steatite and carnelian), copper mirror, nails, knife blades, dress ornaments, finger rings, arrowheads, iron rods, nails and knife blades and stone knife sharpener were found around the head and body of the deceased in grave 1, 9 and 10. Location of the artefacts shows that specific spaces were allocated for the ritual objects and for the belongings in grave 9 and 10, which is the extraordinary features of Thamuniak cemetery.

Bone samples were collected and sent to the University of Chicago (i.e. the collaborator Institute) for scientific analyses. Along with Iron Age skeletons, bone (two teeth) samples from one of the Muslim graves (Grave No. 5) were

Table 2. Radiocarbon dates of the bone sample from Grave 5 at Thamuniak Broze

UCIAMS #	Sample Name	Other ID	D ¹³ C (%)	±	Fraction Modern	±	D ¹⁴ C (%)	±	¹⁴ C age (BP)	±	2 Sigma Calibrated Age
293521	UC097 Petrous	TMBC-2023 Grave No. 5	-18.9	0.1	0.9763	0.0019	-23.7	1.9	195	20	CE 1732-CE 1805

also collected for Radiocarbon dating and aDNA analyses. Due to unfavourable environmental conditions, the bone samples from the Iron Age burials did not contain any DNA and were also too fragile for radiocarbon dating. However, the bone sample from one of the Muslim graves (Grave No.5) did contain sufficient aDNA and based on radiocarbon dating has been assigned to 1732-1805 AD (Table 2). While the DNA analysis of this sample shows its genetic link with the present-day Pakistani population.

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