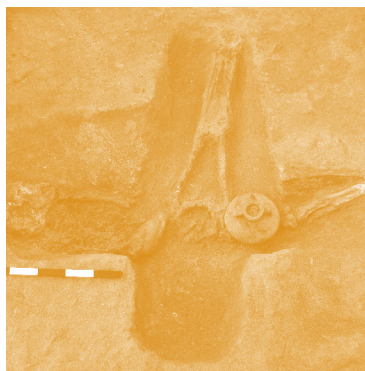


# An early Roman burial ground in Berenike on the Red Sea coast of Egypt



**Abstract:** The cemeteries uncovered in the Red Sea harbor town of Berenike (Egypt), a thriving commercial center for close to 800 years, have been dated, to the early Roman (1st–2nd centuries CE) and late (4th–5th centuries CE) periods, but the ethnicities and religious proclivities of the deceased buried in these graves are still in doubt. Several individual burials as well as numerous ring cairn tombs in the Eastern Desert hinterland also contribute to the picture of mortuary differentiation in the town. The Berenike Project aims to launch mapping work and additional excavations in search of answers to these issues.

**Keywords:** Berenike, burial/grave, inhumation, mausoleum, shaft grave, cairn burials

The Red Sea harbor of Berenike in Roman Egypt was a major transshipment point for the Eastern African and Far Eastern maritime trade in prestigious goods entering the Mediterranean from the mid-3rd century BCE through the 2nd/3rd centuries CE, and was subsequently, before its ultimate abandonment, a contact point for the Meroites and their Eastern Desert allies, the Blemmyes, engaging with the Byzantines

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Polish Archaeology in the Mediterranean 31  
Zych and Woźniak 2022: 245–284

<https://doi.org/10.37343/uw.2083-537X.pam31.11>

### **Acknowledgments**

The co-directors of the Dutch–American Berenike Project (1994–2001), Willeke Wendrich and Steven E. Sidebotham, are acknowledged for entrusting the author with the supervision of the excavation of archaeological trench BE01-44, which turned out to be the first formal cemetery ever found in Berenike. Further research on the burial practices of the Red Sea port were carried out by the author with funding from National Science Centre grant UMO-2014/14/M/HS3/00795, within the frame of the Polish–American Berenike Project (2008–), co-directed by the author and Steven E. Sidebotham, with funding from the Polish Centre of Mediterranean Archaeology, University of Warsaw.

Readers are entitled to one more piece of information. The slightly drawn-out process of final revisions created the opportunity for the authors, one of whom is the excavator of practically all of the graves found by the Polish–American expedition starting from the 2012 season, to include data on new finds from the most recent season in the winter of 2022/2023. These have been incorporated into the main text for a fuller picture.

in the late 4th to mid-6th centuries CE. Recent investigations have resulted in a series of in-depth studies: of the Hellenistic period in Berenike (Woźniak 2022; Woźniak and Rądkowska 2018; Woźniak et al. 2021), the animal cemetery of early Roman times (e.g., Osypińska 2016) and the town's largest and most ancient shrine, the Isis Temple (for archaeological reports of recent work see Sidebotham et al. 2019; 2020; 2021 forthcoming). Research is ongoing on the early Roman harbor of Berenike, which was the main focus of archaeological excavations of the Polish–American project (University of Warsaw/University of Delaware) between 2009 and 2015 (see Zych 2017).

Missing from the wider view are the burial practices of the town's inhabitants, this despite the discovery of several graves since fieldwork started in 1994 (the Dutch–American project) and of a formal cemetery dating from the late period (4th–6th centuries CE) first identified during the 2001 season [Fig. 1].

The Polish–American project currently excavating the site has brought to light another formal cemetery dating from the Augustan period (beginning of the 1st century BCE/early 1st century CE). A concise overview of all of the human burials discovered by the Berenike Project was presented by the Project co-head Steven E. Sidebotham (2014: 622–626; adding mentions of new finds, e.g., Sidebotham et al. 2019: 9; 2020: 9). A grant project of the PCMA UW, initiated by Mariusz Gwiazda, is aimed at studying the formal cemetery west of the town. Extensive fields of cairn burials—at least 640—have been noted west and south of the archaeological site (e.g., Barnard 1998: 397–401; Sidebotham 2011: 263–264) and there is a growing body of evidence of ancient burials in the Eastern Desert constituting the hinterland of the harbor (for a summary see, e.g., Sidebotham et al. 2008: 197–212; additional data on some tested graves in Middle Sikait in Osypiński 2021: 537–538).

## EARLY ROMAN BURIALS IN BERENIKE

With the exception of the formal cemetery situated on the ridge west of the town, all the finds of human skeletal remains from the site have been incidental. Burials are found usually just under the surface, in areas of the town which by the turn of the era were already in ruins and deserted (with just two exceptions from the main town area). The stratigraphic situation has proven to be constant in virtually all instances of burials that have been attributed archaeologically to the early Roman phase. In chronological terms, this corresponds to the renewed

interest of the Roman Emperor Augustus in the profits from the lucrative trade with the East. Roman investment as well as a Roman army presence, which ensured safety on the caravan trail from the Red Sea coast, across the wilderness of the Eastern Desert of Egypt, to the Nile Valley, from where goods would be carried north to the port of Alexandria and thence all over the Mediterranean, helped to rekindle a small, presumably fishing and possibly small-scale trading settlement from the late 1st century BCE. This settlement scratched out an existence in

the dilapidated ruins of the Hellenistic fort and harbor of earlier ages. The archaeological record substantiates a sudden rise to wealth and prosperity, but the nature and status of the pre-existing village remains speculative.

This phase in Berenike lasted for the better part of 200–300 years, its end marked by the withdrawal of the Roman administration and army from the Dodekaschoinos, leaving the land to the Blemmyan tribes coming up from the south and generally at home in the Eastern Desert. Thus, the end of this phase is set sometime in the second half of the 3rd century CE, one of the last evident markers of Roman presence being a dedication to the Roman emperor Caracalla and his mother Julia Domna, left by Marcus Aurelius Mokimos in 215, and an undated inscription documenting the eparch of Mount Berenike, Aemilius Celer, who resided in Berenike in the late 2nd/early

3rd century CE (Sidebotham and Wendrich 1998: 92). The early second half of the 2nd century was also when the Antonine Plague struck Egypt, whereas after 269 Berenike could have been involved in the Palmyrene foray into Egypt.

Graves attributed to the early Roman phase have been discovered primarily in a belt encircling the harbor on the western, landward side of a plateau, set off by the southern branch of the wadi in the southwest, and extending to the area of the rubbish dumps just west of the main town and north of the southwestern embayment [see *Fig. 1*]. A clustering of almost 30 graves occupied a low mound in the northwestern part of the zone (conjoining trenches BE-97,104,125,149,153, excavated between 2014 and 2022 and ongoing) [*Figs 2, 3 top*]. Since four graves presumed to be from this chronological phase were recorded northwest of this location (BE01-44), on the ridge that served in later times, that

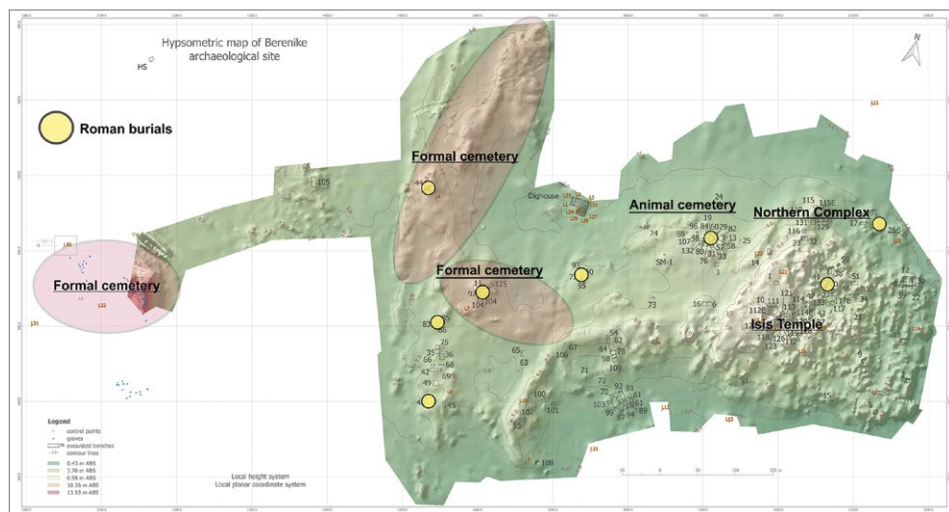


Fig. 1. The Berenike site with the location of remains from the late Hellenistic and early Roman periods (1st century BCE–2nd century CE) (Berenike Project | hypsometric plan A. Szeszko; editing I. Zych, E. Czyżewska-Zalewska)

is, in the late 4th century CE through the early 6th, as the town's formal cemetery [Fig. 3 bottom], there is reason to expect more burials in the intervening area. A few were found in conjoining trenches BE-83/85/86. Graves found in two trenches located further south on the western

plateau (trenches BE-36 and BE-45) mark the southernmost reach of the belt of burials west of the town, within the boundaries set by the wadi.<sup>1</sup> Likewise the burials found in trench BE-90 could be considered an easternmost extension of this western burial zone. The isolated human burial



Fig. 2. Cluster of almost 30 burials from the end of the 1st century BCE and early 1st century CE in Berenike; grave pits marked not to scale; top left, sketch plan of early grave pits in trench BE01-44 (Berenike Project | plan S. Popławski, editing M.A. Woźniak; inset plan, drawing and editing I. Zych)

- 1 More tombs are located on a rocky ridge that rises west of the wadi and extends inland; however, the burials there take on the form of stone cairns typical of the indigenous population of the Eastern Desert. An early Roman intaglio found on the surface next to one of these disturbed tombs, at the very edge of a low cliff overlooking the site, cannot be deemed as proof of an early Roman date of these burials as the pottery scattered around is prevalently of middle to late Roman date.

from the interface of trenches BE-48 and BE-76 lies further to the east, but on the opposite side of a natural roadway that led into town and toward the presumed entrance to the harbor bay in the southwestern embayment. The grave was located on the eastern slopes of a sand dune, which was rather not the easternmost part of the burial belt around the town. This part appears to have served as an animal cemetery, apparently grouped around a small shrine on the top of the dune. The upper part of this human skeleton was explored in 2002 and interpreted as a secondary burial redeposited in the area when even the animal cemetery was long forgotten (Sidebotham 2001–2002). Excavation of the lower part of this skeleton (in an adjacent trench in 2011) did not provide any clues as to the

dating, other than that it post-dated the first half of the 1st century CE (secure date of an adjoining dog burial).

Isolated human bones, notably an infant burial, are known from a location in the northwestern part of the main town and from another location in the southern part of the urban mound. However, they belong to a different order of burial customs. Bones of an infant and two children were discovered among some bones of adults in disturbed fill in trench BE96-11 in the area of the formal cemetery. Interestingly, this find warrants the statement made by the first excavators that the early indigenous population of Berenike was a regular society with all ages and, apparently, both sexes represented in this port community (Barnard 1998: 396).

## GRAVE STRUCTURES

The burials covered in this paper were excavated between 1996 and 2022 (with a break in 2002–2008 between two legs of

the Berenike Project). More discoveries are to be expected as excavations in the area of the formal cemetery are ongoing.

Table 1. Tabularized presentation of all burials/graves from the early period (attributed stratigraphically); \* head direction marked in bold;

	Grave no.	Trench/season	Dimensions	Orientation*	Grave pit shape/dimensions	Fill of pit
1.	96-1	BE96-7		Orientation not observed	No apparent grave (public structure, possibly temenos?)	Layer of sediment and debris
2.	96-2	BE96-9		<b>N-S</b>	Within a small compartment inside a building (town area)	Layer of sediment and debris
3.	96-3	BE96-11			No grave cut traced	
4.	00-1	BE01-36	2.20 m N-S by 1.32 m E-W	<b>N-S</b>	Cut in fill of abandoned water tank	Sand with charcoal and pottery
5.	01-1	BE01-44	1.30 m long, 0.30 m wide	<b>E-W</b>	Cut in bedrock	Sand
6.	01-2	BE01-44		<b>E-W</b>	Cut in bedrock	Not excavated
7.	01-3	BE01-44		<b>E-W</b>	Cut in bedrock	Not excavated
8.	01-4	BE01-44		<b>N-S</b>	Cut in bedrock; possibly not used or robbed	Sand, no burial

Table 1. Continued

	Grave no.	Trench/season	Dimensions	Orientation*	Grave pit shape/dimensions	Fill of pit
9.	01-5	BE01-45		E-W	Pit outline not traceable	Sand
10.	01-6	BE01-45		N-S	Pit outline not traceable	Sand
11.	11-1	BE11-76 (+BE01-48)		N-S	Pit outline not traceable; redeposited(?)	Sand; rubbish dump and animal cemetery fill
12.	12-1	BE12-83+85+86	About 1.00 m N-S, about 0.60 m E-W (within trench BE12-83 only)	–	Cut almost vertical to bedrock (partly exposed in trench) in fill of ruined Hellenistic fort tower	Sand with gypsum particles and brick fragments
13.	12-2	BE12-85	2.00 m long, 1.00 m wide		Roughly oval pit, wider at the eastern end; covered with decayed gypsum stones/coral fragments; set on ruined foundation of Hellenistic fort tower	Sand
14.	13-1	BE13-90	Approximately 1.30 m long SE-NW, about 0.40 m wide SE-NW	SE-NW	Pit outline practically invisible	Sand identical with layer, more loose
15.	13-2	BE13-90		SE-NW	Pit outline practically invisible	Sand identical with layer, more loose
16.	14-1	BE14-97	2.00 m long, 0.80 m wide; 0.40 m deep	E-W	Poorly visible pit	Sand
17.	15-1	BE15-104	1.08 m long, 0.40 m wide; 0.20–0.25 m deep	SW-NE	Very small pit	Sand
18.	15-2	BE15-104	1.63 m long, 0.56 m wide; 0.37 m deep	N-S	Deep pit, easily traced in sand layer, almost to bedrock	Sand
19.	15-3	BE15-104	2.04 m long, 0.64 m wide; 0.68 m deep	NW-SE	Deep, easily recognized pit, cutting through the water-collection system and early Hellenistic layers underneath	Sand; neck of Egyptian amphora presumably from the water-collection system
20.	18-1	BE14/15/18-97+104		NE-SW	Poorly visible grave pit, shallow (without reaching the Hellenistic floors)	
21.	19-1	BE19-125	1.85 m long, 0.61 m wide; approximately 0.15 cm deep	NW-SE	Oval pit	Sand
22.	19-2	BE19-125		NW-SE	Pit cannot be traced	
23.	19-3	BE19-125	Approximately 0.40 m deep	NW-SE	Only southern part of pit visible before extension (head and upper part of chest only); poorly visible outline, rather shallow	Sand with ash, encrusted salt and piece of gypsum

Table 1. Continued

	Grave no.	Trench/season	Dimensions	Orientation*	Grave pit shape/dimensions	Fill of pit
24.	19-4	BE19-125	2.70 m long, 1.08 m wide; 0.47 m deep	E-W	Well visible pit, deep (down to bedrock), much larger than the coffin, which stands directly on bedrock	Sand: coarse, olive-brown in color with salt particles
25.	19-5	BE19-125	1.50 m long, 0.47 m wide; 0.14–0.15 m deep	E-W	Pit quite clear in outline, especially in the lower part	Sand: coarse, olive-brown in color salt particles
26.	19-6	BE19-125		NW-SE	Pit outline impossible to trace in heavily salt-concreted layer	
27.	19-7	BE19-125	1.57 m long, 0.55 m wide (pelvis), 0.68 m deep (0.32 in fill + 0.36 m in bedrock)	NW-SE	Deep pit, N-S, fairly well visible, especially the lower part cut into bedrock	Sand
28.	19-8	BE19-125	1.55 m long, 0.68 m wide, 0.67 m deep (0.32 m in layer [ctx 012]+0.36 m in bedrock)	E-W	Deep grave pit, fairly well visible, lower part cut into bedrock	Sand
29.	19-9	BE19-125		NW-SE	Pit outline impossible to trace in heavily salt-concreted layer	
30.	19-10	BE19-125		NE-SW	Pit impossible to trace due to heavily salt-concreted layers	
31.	19-11	BE19-125		N-S	Not fully excavated	Sand
32.	19-12	BE19-125		E-W	Not excavated	
33.	19-13	BE19-125		NW-SE	Not excavated	
34.	22-1	BE22-149		NE-SW	Pit outline practically invisible	Sand identical with layer, more loose
35.	22-2	BE22-149		NW-SE	Pit outline practically invisible	
36.	22-3	BE22-149		NW-SE	Deep pit in the fill of the main bathhouse hall, outline not visible	Drifted fine-grained sand, same as layer
37.	22-4	BE22-149	1.80 m long, 0.60 m wide, 0.56 m deep	E-W	Oval pit	
38.	22-5	BE22-149	About 0.10–0.20 m deep	N-S	Very shallow	
39.	23-1	BE23-153	Preserved structure: 0.70 m long, 0.20–0.30 m wide	NW-SE	Pit outline untraceable in the sand fill; preserved fragment of possible stone cover—nine small boulders forming oblong mound without binding material—in southeastern part, above the leg part of the burial	Sand



Table 1. Continued

	Grave no.	Trench/season	Dimensions	Orientation*	Grave pit shape/ dimensions	Fill of pit
40.	23-2	BE23-153	2.20 m long, 0.60 m wide; 0.41 m deep	N-S	Cuts into the southeastern end of grave 15-3	Loose sand, light yellowish brown; potsherds, charcoal and broken shells
41.	23-3	BE23-153	1.65 m long, 0.70 m wide; 0.92 m deep	N-S	Well defined oval shape, reaching bedrock; not used.	Windblown sand
42.	23-4	BE23-153	1.96 m long, 0.64 m wide; 0.34 m deep	NW-SE	Oval-shaped pit; probably not used	Windblown sand



Fig. 3. Early burial grounds in Berenike: top, general view of the section around the Hellenistic bathhouse, looking south (tentative cluster); bottom, general view of the section on the cemetery ridge, looking south, early graves in bedrock at center left, underlying 5th-century CE chamber tombs; see Fig. 2, top left (Berenike Project | photos S.E. Sidebotham; plate design E. Czyżewska-Zalewska)

To date, 42 graves have been either identified and explored or just identified [Table 1]. Of these, three were empty, apparently never used and four others were located but not excavated. The discoveries were made in the 1996 (first burials found), 2000 and 2001 seasons (this falls in the time of the Dutch–American expedition) and then in practically every season starting with the one in 2012 (the Polish–American leg of the Berenike Project).

### GRAVE PITS

Grave pits for the burials were dug straight in the ground and their dimensions depended primarily on the circumstances. Since the fill of the pits consisted of the same material in which they were dug, the outlines of the pits could not be traced in roughly half of the recorded cases. In a few instances, severely salt-concreted layers made archaeological exploration extremely difficult;<sup>2</sup> in such

cases it was also impossible to trace the outlines of the original pit [Table 1:19-6, 19-9]. Moreover, the process creating such evaporate deposits tends to affect organic remains, leading to the very poor preservation of bones and their high friability upon exposure to the air.

A few of the pits reached the underlying rock and their lower parts were hewn into it [Table 1: 01-1-4, 19-7, 19-8; Fig. 4]; one was apparently cut into the rock in its entirety [Table 1: 01-4], but for the most part the pits were dug in natural layers. In one case [Table 1:12-2], advantage was taken of the top of the remains of a dismantled wall, which formed a pavement of sorts for the burial (but this burial seems to have been different in other respects as well; see below). In a few instances, the pit reached bedrock, which could have been treated as a hard surface acting as a pavement, although this is more than likely incidental [Table 1:12-1, 15-2, 19-4,

- 2 The following explanation provided by the team's archaeomalacologist Alfredo Carannante (epistolary communication, 6 January 2023) helps to understand the stratigraphical situation in such cases: "The typical environment of Berenike is that of a *sabkha* (geological term to indicate a coastal, supratidal mudflat or sandflat in which evaporite-saline minerals accumulate as the result of semiarid to arid climate). *Sabkhas* are gradational between land and the intertidal zone within restricted coastal plains just above normal high-tide level. Within a *sabkha*, evaporite-saline minerals sediments typically accumulate below the surface of mudflats or sandflats. In the sand under Berenike, the water-table near the sea is loaded with salts: sodium chloride, calcium carbonate and sulphate, etc. in solution. The environment is arid and evaporation is strong. Due to the heat, the water rises by capillarity in the sand from the groundwater to the surface. As the water rises to the surface, at midway it evaporates and deposits the salts in the sand where it evaporates. The consequence is that at a certain depth below the surface, in the sand, a table of salts is formed, which can be sodium chloride, calcite, aragonite, gypsum/anhydrite or a mix of all. This salts deposit cements sand, shells, pottery and everything in the sediment. This evaporate table is more or less parallel to the surface and obviously should not be considered as a geological or archaeological stratum nor as a stratigraphic unit, given that it is only a post-depositional pedological level which intersects strata of different chronology. So you can have Hellenistic, Roman and late strata immediately below the evaporite table, which continue immediately above the table undisturbed because the salts are deposited between them. Thus you can have statues, pottery, stelae and other objects completely incorporated in anhydrite or other salts because they act as preferential precipitation points".

23-3]. The average depth of the grave pits recorded was in the range of from 0.37 m to 0.47 m, but there were at least four regular burials made in pits barely 0.10 m to 0.25 m deep. In two cases (where the graves crossed at right angle, the depth was in the range of 0.67–0.68 m, with 0.36 m of that depth already in bedrock [Table 1: 19-7 and 19-8; see Fig. 4]. The pit cut in bedrock in its entirety was 0.60 m deep [Table 1: 01-4]. Two other recorded pits were 0.56 m and 0.92 m deep [Table 1: 22-4 and 23-3 respectively]. While this is not always the rule, the largest of the pits were usually of an average depth. Again, it should be emphasized that depth is the one dimension in the case of these grave pits that could have suffered excessively

from natural erosion of the surface in this part of the site. This could be to some extent the reason for the crushing of the skulls in at least 12 of the burials—once the surface layer had been eroded away, the parts of the skeleton too close to the surface would have been prone to damage more than usually. This is the case of the four regular burials mentioned as being made in pits apparently 0.10 m to 0.25 m deep [Table 1: 15-1, 19-1, 19-5, 22-5; Fig. 7:19-1]. Erosion of surface layers and, in the case of 19-1, possibly work on graves 19-4 and 19-6 could have added to the damage. It should be stressed that the relative chronology of the graves is practically impossible to establish owing to their location in a typical sand layer. The



Fig. 4. Burial 19-7, above and cutting into 19-8, trench BE19-125, looking north, burial 19-11 by the north trench wall at top (Berenike Project | photos S.E. Sidebotham)

extent of the erosion processes at work in this part of the site are demonstrated also by the scant evidence of any kind of tomb superstructures (for these see below).

The horizontal dimensions of the graves, while not uniform, are more regular. In eight cases, the length of the pit ranged between 1.80 m and 2.70 m, the average being around 2.00 m and 2.20 m. A standard width in these cases is approximately 0.60 m. One is 0.80 m wide and the widest is 1.32 m. The set of grave pits with the length grouped around 1.50–1.63 m consists of five examples. Here, the width oscillates between 0.47 m and 0.70 m. The smallest pit (which contained a full-size adult burial as it is) was just 1.08 m long and 0.40 m wide; its depth was 0.20–0.25 m (although it may have been the effect of erosion processes on the surface) [Table 1:15-1]. At the other end of the spectrum, the largest pit was 2.70 m long and 1.08 m wide, 0.47 m deep; it contained the only burial known to have been in a wooden coffin, but even so it was way too big for the box, which measured 1.78 m in length and 0.52–0.58 m in width (its height of roughly 0.45 m was ideally fitted to the grave pit, even if this was fortuitous because of the bedrock occurring here at this depth).

The raw numbers show a lack of obvious standards in grave digging, which is quite naturally the effect of the circumstances of the burial ground. The detail in charge of the digging never knew what to expect (although veteran archaeologists at Berenike were quick to learn how to “read” the ground). The graves were located in an area that was filled with the dilapidated and mostly dismantled ruins of Ptolemaic-age structures (an army

fort and related structures, including the presumed elephant pen, and a relatively monumental bathhouse). Stubs of walls in the ground could have served as indicators where to find soft or at least softer ground, consisting of rubble in sand, in the intervening spaces. An analysis of the graves in the central part of the western belt shows a clear tendency to use such “open spaces” in the ruins. The same is true of a burial made in a filled-in water tank from an earlier age [Table 1:00-1; Fig. 10] and another one placed inside the ruins of a Ptolemaic fort tower [Table 1:12-1]. It is obvious that grave pit dimensions would have been a factor of what was physically possible, presumably within a short period of time before the funeral took place.

The one case of a burial within the area of the city, the dating of which however is tenuous, also follows the principle of finding softer ground amidst ruins [Table 1:96-2]. Finally, the circumstances of burial of the infant from trench BE96-7 were not recorded [Table 1:96-1], although the interment appears to have been made in a layer of fill without any evident connection to any kind of occupational surface.

### BURIAL SUPERSTRUCTURES

To say that the evidence for tomb superstructures is meager is to say nothing. Surface erosion due to natural phenomena (wind and flash flooding) on the western plateau has been extensive. As already indicated, the excavator is often unsure of whether the full depth of a grave pit has been preserved. It would be reasonable to expect some kind of superstructure, whether just a mound of



sand or a pile of rocks, over graves that are as shallow as these, a practice that is common throughout the Eastern Desert across millennia. There is no reason to think that those burying their dead in the western district of Berenike were not equally practical and pragmatic for the same reasons: protection from the elements and animals. That rodents or dogs managed sometimes to get at freshly buried remains seems to be attested by one of the southernmost burials, which appears to have had one foot gnawed off [Table 3: 01-5]; at least three skeletons are missing the toes, which could also be slated to rodent-action [Table 3: 15-2, 19-5, 22-3]. That the port was full of more or less freely running animals, like dogs and cats, is a well-known fact in view of the extensive animal cemetery from precisely the same

period that has been excavated and published in recent years. Rodent bones have been identified in the bone assemblages from the site, confirming the presence of these animals, which is in any case taken for granted in places where ship supplies, including food for long voyages, would have been prepared and stored.

One of the graves in the area of the ruins of a Hellenistic fort tower preserved a low mound of decayed gypsum rocks covering the skeletal remains [Table 1: 12-2], which lay on an accidental pavement formed of the ruins of the tower wall [Fig. 5]. One of the pits dug in the bedrock on the western cemetery ridge preserved three anhydrite rocks protecting the part of the head (which in this case extended slightly above the ground level around the pit) [Table 1: 01-1]. Finally, one of the most recently uncovered graves preserved nine small boulders forming an oblong mound without any bonding material in the part above the legs of the skeleton [Table 1: 23-1].

Moreover, the single coffin burial discussed above [Table 1: 19-4] also provides an argument *ex silentio* of some kind of tomb markers on the surface. Comparing the size of the wooden box with the depth of the grave pit, one is justified in thinking that some form of protective or informative covering would have been placed over this burial (always keeping in mind the possibility of fairly significant erosion of the surface layer). Its location within the burial ground as well as its size (assuming that the marker covered the entire length of the grave pit, which does not need to be so) would have made it a most distinctive landmark in this burial ground.



Fig. 5. Stone mound over a burial in BE12-85 (12-2) (Berenike Project | photo S.E. Sidebotham)

Given the nature of these remains, it is not unlikely that whatever modest remains may have still been on site, they could have been missed even by the most careful excavator. Yet the fact that they existed in one form or another seems to be beyond question. In two cases one grave touches upon the other [see *Fig. 2: 19-1* and *19-6, 15-3* and *23-2*] but this does not necessarily mean that the awareness of one grave had been lost when digging the second one. The sole exception that is difficult to explain are two graves, of the same depth, that cross each other directly in the middle and a third grave that disturbed an earlier one (*19-3* and *19-7* probably more or less contemporary, cutting the older grave *19-8* in two different places) [see *Fig. 4, Table 1:19-7, 19-8*]. However, in all of these cases, one of the graves in question is oriented roughly north–south and if the chronological phasing of the tombs (which one encroaches on the other) is considered, then these would be later graves. Perhaps this could be considered as an indication of at least two phases in the existence of the cemetery?

#### GRAVE ORIENTATION AND BODY POSITION

The graves, especially in the central part of the funerary belt around the town, do not follow any single orientation. In this group, consisting at present of 28 burials (one of these being an earlier excavated grave; *Table 1:96-3*), both orientations according to the cardinal directions—strictly east–west and north–south—are represented, in both cases however with greater or smaller deviations. In general terms, there are two graves exactly east–west and seven graves that are more or less oriented southwest to northeast, and at

least seven which are more or less northwest to southeast; four are almost exactly north–south and another six show only a slight deviation to the northwest. One should add to this the graves scattered in other parts of the funerary belt, most likely part of the same burial ground, but the overall conclusion is that no specific orientation was followed slavishly in this area. Indeed, the location of individual grave pits appears to factor in the position of the structures of the ruined Hellenistic bathhouse that stood once in this area. Grave pits are introduced in the soft sand fill of the central corridor and inside individual units, rarely encroaching upon the remains of walls.

Interestingly, while it would be natural in such circumstances to dig directly next to such structural remains, this is certainly not the case, which in turn suggests that there was indeed some principle governing the location of individual graves. Looking at the layout of the graves in the central part of the cemetery [see *Fig. 2*], especially in relation to the underlying bathhouse architecture (which, more than likely, would have appeared to the grave-diggers as sand-covered mounds rather than ruined structures), one might have the impression of a certain clustering of graves: one such cluster appears in the northeastern part, where the graves are concentrated in a roughly radial pattern around the remains of a rectangular pool [*Fig. 2: graves from the 19 series*]. In fact, groups of graves seem to start off from each side of this pool. The next cluster of graves is off to the southeast, grouped just east of the Hellenistic well structure, between it and a cistern [see *Fig. 2: graves from the 15*

and 23 series; see also *Fig. 3*]. The third such grouping can be seen at the western end of this one, this time in relation to one of the circular bathing units (*tholoi*) [*Fig. 2*: graves from the 22 series]. Two graves in the ruins of the Hellenistic fort tower located just 30 m further to the west [*Table 1*: 12-01, 12-02] could also be said to represent a cluster, as could also the three graves in bedrock on the westernmost fringes of this zone [*Table 1*: 01 to 01-3; see *Fig. 2* inset].

The body position was as a rule extended, supine (on the back), legs straight. At least two instances of bodies intentionally laid on their right side were recorded [*Table 3*: 96-2, 15-3, 19-9; *Fig. 6*: 15-3]; however, in the first of these cases the neck was bent back unnaturally suggesting irregular deposition, and in the lattermost case only the lower body was on the right side and the legs partly flexed. An adult burial had the knees strongly pulled up, with the right foot placed on the bottom of the grave pit making the knee stick out of the pit; the upper part of the left leg was folded under the right leg, while the lower part was extended beyond the pit [*Table 2*: 15-1]. This unusual position, however, is due to the body being placed in a pit much too small for it.

The individual buried in the coffin, was found on his side, but it is a case not to be considered here because the position should be interpreted as being due rather to a mishandling of the coffin before or during the funeral. Other instances of a position other than supine include a strongly contracted body laid within the confines of an abandoned water tank [*Table 3*: 00-1; see *Fig. 10*] and a body apparently disturbed post-depositionally, with

the skull lying on its face by the pelvis and the mandible found separately [*Table 3*: 13-2; see *Fig. 11*].

The arms were always by the sides, but the forearms were bent and the hands placed on the pelvis in nine instances [*Table 3*: 14-97, 19-1, 19-3, 19-5, 19-6, 19-7, 22-2, 22-3, 23-2; ]; in five, they lay loose by the sides [*Table 3*: 96-3, 19-2, 19-10, 22-3, 23-1]. In one case, the right arm and forearm lay by the body while the left rested on the pelvic area [*Table 3*: 22-1], and in another, a skeleton found headless, the right arm was folded across the chest with the hand on the left elbow, while the left lay by the side with the hand on the pelvic area [*Table 3*: 00-5]. In one instance, the arms were crossed on the chest, but too disturbed to tell which one had been on top [*Table 3*: 19-9]. In the remaining cases, the bones were either too disturbed to be identified or missing altogether, or else no data is available.

The legs were sometimes flexed at the knees, laid to one side. In one case, the overall impression was of a body too long being fitted in a pit that was too short for it [*Table 1*: 22-1]; the other case has already been discussed above [*Table 3*: 15-1]. However in three other cases, this seems to have been intended [*Table 1*: 15-3, 19-4; 19-9]. In one case, the left foot was crossed over the right one [*Table 3*: 23-2].

Looking at the position of the heads, as far as reasonable inferences are allowed in view of the frequent damage to the skulls, it was usually facing up. In five cases, quite evidently the body had been laid in the pit so as to support the head against the back wall, thus raising it as if to gaze forward [*Table 3*: 01-1, 15-1, 15-2, 19-6, 19-7]. In a single instance, a stone slab was placed under the head [*Table 3*: 00-1]. The



Fig. 6. Inhumation burials from the section around the Hellenistic bathhouse: top, female burial from trench BE96-11, north at right; center female burial BE15-2, trench BE15-104, south at right (head orientation of these two burials generally to the south); male burial BE15-3, trench BE15-104, north-west at right, head orientation generally west (Berenike Project | photos S.E. Sidebotham; top, after Sidebotham and Wendrich 1996: Fig. 3-84; plate design E. Czyżewska-Zalewska)



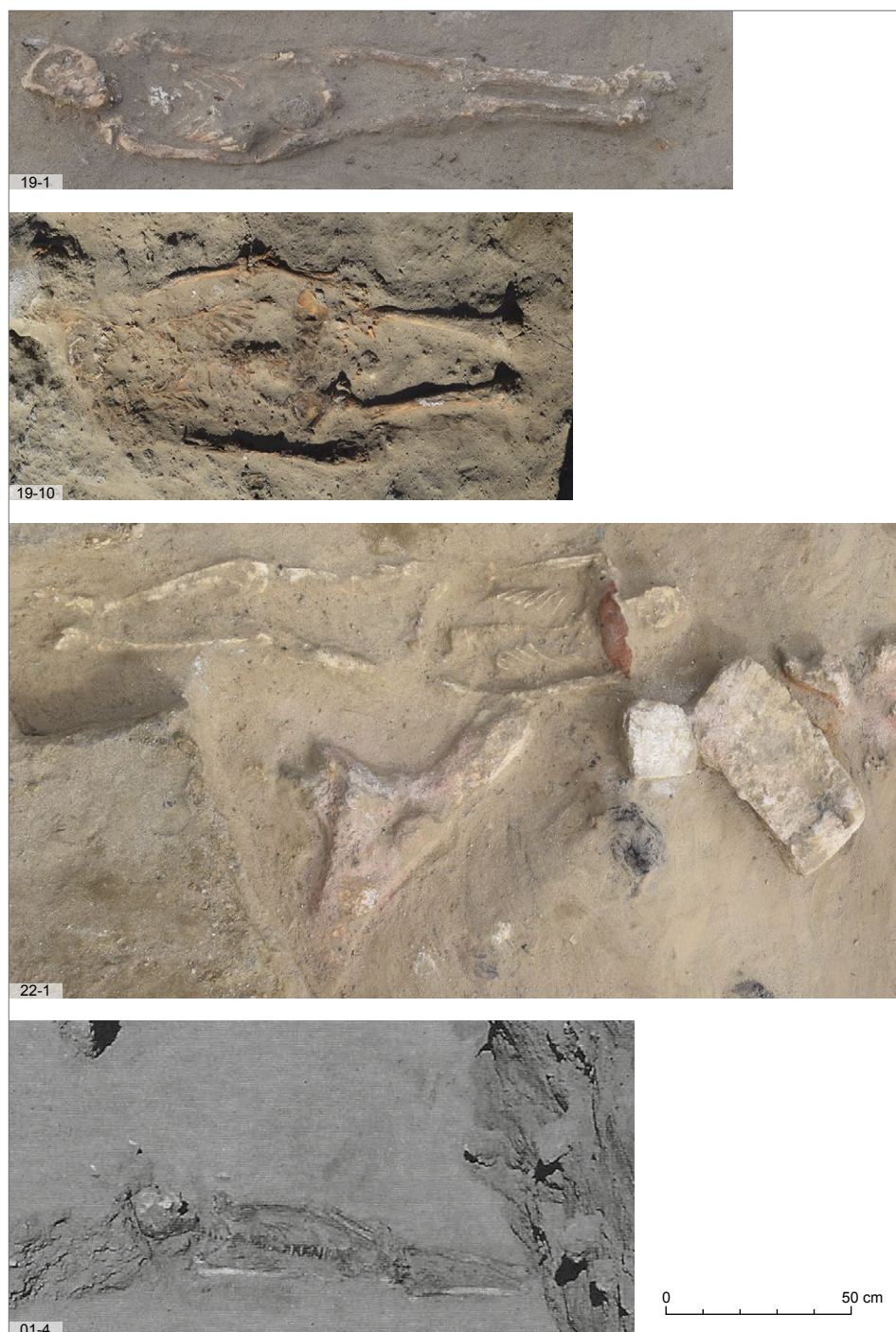


Fig. 7. Inhumation burials with E-W orientation, heads either to east or west (Berenike Project | photos S.E. Sidebotham)



Fig. 8. Burials with N-S orientation, heads either to north or south (Berenike Project | photos S.E. Sidebotham)



available data suggests that there were four instances of the skull turned to the left [*Table 3:96-2, 13-1, 19-8, 23-3*] and two when the head was facing to the right (this, however, could have been the effect of taphonomic processes) [*Table 3:00-1, 22-2*].

There seems to be no rule to this placement until one takes a closer look at the issue in the double light of which way the head is oriented in the burials and, pendant on that, which way the deceased was looking, assuming the heads resting against the side of the grave pit are an illustration of a ritual custom of some kind.

First, the head orientation. For a precise geographical direction one should consult the data in *Tables 1* and *2*; this has been generalized to the four cardinal directions in order to show certain trends [*Table 2*]. Color dots on the plan of the central part of the burial ground, indicating the direction in which the head lies in every of the noted cases, are also helpful in visualizing these trends [see *Fig. 2*]. There is a clear tendency to have the head on the broadly understood western (11 cases) and southern (seven cases) sides of the grave pits; however, the east



Fig. 9. Burials with oblique orientation (NW–SE and SW–NE), reflecting a general, either western (to the left) or eastern (to the right) direction of head placement (Berenike Project | photos S.E. Sidebotham)



Fig. 10. Burial in abandoned water tank (Berenike Project | photo S.E. Sidebotham)

and the north are represented in almost equal numbers (five and six cases respectively), and significantly, they seem to be clustered in the southwestern group described above and occurring singly on the southern fringes of the other two clusters as well as in the satellite graves around

Table 2. Direction of head placement in the burials from Berenike (*n*=29)

Direction	Number	Burials
East	5	01-1, 12-2, 22-1, 22-2, 22-3
North	6	00-1, 13-2, 11-1, 19-9, 22-5, 23-2
West	11	01-5, 13-1, 15-1, 15-3, 18-1, 19-1, 19-4, 19-5, 19-8, 19-10, 23-1
South	7	96-3, 01-6, 19-2, 19-3, 19-6, 19-7, 19-11



Fig. 11. Bundled burial with animal scapula (spade?) (Berenike Project | photo K. Braulińska)

the central burial ground. An analysis of the direction faced in the 16 cases in which the position of the skull has been recorded (whether resting propped up against the back end of the pit, placed face-up which could be the same as facing forward, or turned either left or right) gives the following results:

- one to the east [Table 3:23-2] (two if the burial in 19-4 is assumed to have been originally supine with the head facing up; in the disturbed position it is looking southwest).
- six to the north [Table 3:96-3, 13-1, 15-2, 19-7, 19-8, 22-2]
- four to the west [Table 3:96-2, 00-1, 01-1, 22-3]

— two to the south [Table 3: 15-1, 19-9]

— three to the southwest [Table 3:15-3, 19-6]

Should the west, south and southwest be considered together, this amounts to nine in all, to the seven or eight examples of north and east directions. The breakdown of the data from this point of view does not show any singular trends. Indeed, the burials where the head was propped up against the back of the pit are themselves varied: two to the north and one each to the south, west and southwest.

Last but not least, there was one instance of just the skull being preserved in the grave pit. It was fitted into the bottom of an early Roman amphora intentionally cut for the purpose [Table 2:18-1].

## DESCRIPTION OF THE SKELETONS

The anthropometric data on the skeletons, such as it is, has been collected from published sources as well as unpublished trench documentation for the earlier finds and from current excavation documentation. The older data were analyzed by Hans Barnard (1998), while some of the recent finds have been consulted with archaeozoologist Marta Osypińska when she was on site (burials from 2015). Minute documentation of two skeletons from trench BE13-90 was prepared by Kamila Braulińska. Otherwise archaeological notes on the finds were completed by the excavator Marek Woźniak (all except for BE11-76). The tabularized presentation of these data reflects their unevenness in terms of the detail they provide [Table 3], which is due for the most part to the uneven state of preservation of the remains, the impossibility of lifting the very friable bones, which tend to disintegrate once

exposed to the air, but also to the incidentality of these discoveries which hardly ever coincided with the presence on site of a physical anthropologist.

Altogether, the remains of 43 separate individuals have been recorded. The slight difference between the number of graves and the number of interred individuals is due to the fact that a few child or infant bones were recovered from an apparently secondary deposit in the 1996 season. Otherwise, the rule is a single interred individual per grave. Of these, roughly half were too poorly preserved to be studied or else consisted of single bones. Of the individuals provisionally identified to age ( $n=22$ ), all but two were adults or probable adults, with two of these being perhaps of adolescent age. More precise age identifications were proposed for four skeletons: a female aged 40–50, a male described as “probably older”, a male aged 30–40

Table 3. Anthropological documentation of the burials; separate data collection by archaeologists Marek Woźniak (2013–2023) and Kamila Braulińska (2013); anthropological identification by Hans Barnard (before 2001) and Marta Osypińska (2015 and later)

	Grave No.	Trench/season	Burial/bones	Anthropological measurements	Sex/age
1.	96-1 (4060-L)	BE96-7	Skeleton: fetal bones (Barnard 1998: 395, Table 8-19, Pl. 18-10)	Left tibia 5.44 cm	Infant, born premature
2.	96-2 (3472-L)	BE96-9	Skeleton: skull and pelvis crushed, most of the lower extremities missing (Barnard 1998: 392, Table 18-8, Fig. 18-8)	Estimated stature 1.71 m	Adult, male, age 30–40 years
3.	96-3 (0380-L)	BE96-11	Skeleton: skull crushed, reconstructed (Sidebotham 1998: 107 and Fig. 3-84; Barnard 1998: 389–392, Tables 18-2, 18-3, Figs 18-4, 18-5, 18-6)	Estimated stature 1.61 m	Female, 40–50 years old
4.	96-4	BE96-11	Scattered bones of more than one individual; fragmentary and burnt (see Sidebotham 1998: 107 and Fig. 3-84; Barnard 1998)		
5.	96-5	BE96-11	Femor and pelvis (Barnard 1998: 396, Fig. 18-11)		Child, 6–9 years old
6.	96-6	BE96-11	Vertebrae, ribs and teeth; few bones of right hand (same?) (Barnard 1998)		Adult
7.	96-7	BE96-11	Part of hand and skull (Barnard 1998)		Child
8.	96-8	BE96-11	Talus (Barnard 1998)		
9.	96-9	BE96-11	Lumbar vertebra (Barnard 1998)		
10.	96-10	BE96-11	Tibia, end phalanx of toe (Barnard 1998)		18 year old
11.	00-1	BE01-36	Skeleton; upper right arm and most of the ribs and pelvic bones missing; severely decayed and friable (Sidebotham 2007: 36, Pl. 4-4)	About 1.35 m long	Adult(?)
12.	01-1	BE01-44	Skeleton (Sidebotham and Wendrich 2001–2002: 36 <i>passim</i> )	About 1.30 m long	Adolescent
13.	01-4	BE01-45	Skeleton (Sidebotham and Wendrich 2001–2002: 36, Fig. 27)		
14.	01-5	BE01-45	Skeleton, headless, left foot partly gnawed away (Sidebotham and Wendrich 2001–2002: 36, Fig. 28)	Approximately 1.70 m long	Adult(?) male(?)
15.	01-6	BE01-45	Skeleton, headless (Sidebotham and Wendrich 2001–2002: 36 <i>passim</i> )		Adult(?) male(?)
16.	11-1 (01-6)	BE11-76 (+BE01-48)	Skeleton, found in two parts in two trenches; legs without feet, pelvic bone, three vertebrae, forearms and hands found in 2011 (Sidebotham and Wendrich 2001–2002: 36 for upper half)	Approximately 0.95 m long (preserved in trench BE11-76)	Adult(?)
17.	12-1	BE12-85	Skeleton, very poorly preserved	–	
18.	12-2	BE12-85	Bones in very poor condition, friable, parts of long bones, skull fragments, part of pelvis	Femur 0.38 m long	Adult(?)

Body position	Arms & hands / legs and feet	Skull (with orientation)	
Anatomical; supine		Skull to south	1.
Anatomical; on right side, neck bent backwards unnaturally	Sturdy bones with pronounced places of tendon insertion indicating a muscular individual; no pathologies	Skull to south, facing west	2.
Anatomical; supine	Arms by the sides (tibia and feet not studied because left in the baulk)	Skull to south, looking up; pronounced overbite	3.
Disturbed			4.
Disturbed			5.
Disturbed			6.
Disturbed			7.
Disturbed			8.
Disturbed			9.
Disturbed			10.
Anatomical; crouched, on right side	Left upper arm on the body, lower left arm bent at right angle with hand resting on left knee. Lower right arm by the body, right hand folded and lying just below the mandible. Legs folded at an angle of 45 degrees, knee of right leg slightly above that of the left leg	Skull resting on sandstone slab, to north, facing west	11.
Anatomical; supine	Forearms and hands on the pelvic area	Skull to east, raised forward and resting against the edge of the pit	12.
Anatomical; supine	Extended	Skull to west	13.
Anatomical; supine	Right arm folded across the lower chest with hand on left elbow; left arm by the body, hand resting on pelvic area. Leg position extended, disturbed by the gnawing (left leg slightly flexed to the side)	Headless, but oriented to the south	14.
Anatomical; supine	No data	Headless	15.
Anatomical; supine	Legs extended straight	Head to north	16.
Disturbed			17.
Disturbed	Two long bones <i>in situ</i> , perhaps a third, rest of bones disturbed	Skull fragments rather to the east; fragmentary, mandible with teeth, apparently worn	18.



Table 3. Continued

	Grave No.	Trench/season	Burial/bones	Anthropological measurements	Sex/age
19.	13-1	BE13-90	Skeleton, incomplete	1.27 m long (not complete), about 0.36 m wide (pelvis)	Adult male(?)
20.	13-2	BE13-90	Skeleton, very poorly preserved	Long bone measurements: femur 42 cm, tibia 38.5 cm, fibula 38 cm	Young adult(?) male(?)
21.	14-1	BE14-97	Poorly preserved	1.75 m long (missing part of feet and top part of skull), width at shoulders 0.39 m, at pelvis 0.36 m	Adult male(?)
22.	15-1	BE15-104	Forced into a pit too small for it		Adult male(?)
23.	15-2	BE15-104	Relatively well preserved, missing toes; skull crushed but complete	1.70 m long (approximately), 0.27 m wide (shoulders)–0.24 m (pelvis)	Female(?) young(?)
24.	15-3	BE15-104		0.65 m long (approximately) in bent position	Male(?), probably older, rather small and massive figure
25.	18-1	BE14/15/18-97+104	Preserved skull fragment in the lower part of an early Roman amphora cut to this shape. Very poor preservation of bones due to salt concretion, powdered state despite the amphora		
26.	19-1	BE19-125	Missing only small bones from the hands. Skull heavily crushed, the facial part was probably flush with the ground surface	1.66 m long, 0.34–0.35 m wide	
27.	19-2	BE19-125	Very poorly preserved, friable condition of the bones due to salt concretions; crushed skull, forearms and hand severely damaged	0.93 m long from top of head to knees, 0.30 m wide	
28.	19-3	BE19-125	Poorly preserved; skull crushed but <i>in situ</i> , complete skeleton except for small loss of bone in the right femur above the knee	1.64 m long, 0.30 m wide (pelvis)	
29.	19-4	BE19-125	Bones very poorly preserved, <i>in situ</i> , but salt-disintegrated, fragile, black-brown in color.		Male(?)
30.	19-5	BE19-125	Complete except for missing toes. Very friable bones, difficult to clean.	1.34 m long, 0.33 m wide (pelvis)	

	Body position	Arms & hands / legs and feet	Skull (with orientation)	
19.	Anatomical; supine	Left arm complete, right arm missing forearm; legs missing	Skull to the southeast, on left side, facing left	
20.	Not anatomical, disturbed post-depositionally		Skull lying on facial part by pelvis, mandible found separately	
21.	Anatomical; supine	Arms by the body, forearms on pelvis	Skull to E–W	
22.	Anatomical; supine	Knees strongly pulled up; right foot placed flat on the bottom of the grave pit, making the knee stick out on the surface (destroyed by erosion); upper part of left leg hidden under right leg, lower part extended beyond the pit (preserved part of calf, but no foot)	Skull to southwest, facing southeast probably, resting against the northwestern edge of the pit, sticking out of the ground; almost completely eroded away	
23.	Anatomical; supine	Arms by body, forearms on pelvis	Skull to south, resting against southern edge of pit; crushed	
24.	Anatomical; on right side; fully extended	Left hand on hip.	Skull to northwest, facing southwest	
25.	Supine		Skull to southwest	
26.	Anatomical; supine	Arms by the body, forearms on pelvis	Skull to southwest	
27.	Anatomical; supine	Arms and hands by the body	Skull to southeast	
28.	Anatomical; supine	Arms by the body, forearms and hands on pelvis	Skull to southeast	
29.	Anatomical, initially supine. Piled up on the left side (of the body) at deposition	Left hand on hip and pelvis, right arm by the body but in front of it, on the coffin bottom Legs slightly flexed	Skull to west, facing south	
30.	Anatomical; supine	Arms by the body, forearms and hands on pelvis	Skull to west	

Table 3. Continued

Grave No.	Trench/season	Burial/bones	Anthropological measurements	Sex/age
31.	19-6	BE19-125	Almost complete (missing feet)	1.18 m long, 0.26 m wide (pelvis)
32.	19-7	BE19-125	Complete skeleton, relatively well preserved, bones hard, massive to look at	1.70 m long, 0.30 m wide (pelvis) Adult(?)
33.	19-8	BE19-125	Upper part of skeleton undisturbed, but poorly preserved due to salt concretions, rather massive, bones down to knees destroyed in the digging of 19-7; Two long bones from the feet in disturbed position in the eastern part of the pit, pushed to the northern side of the pit. The left one is bigger than the right one, the knee part clearly flat, more massive, possibly with pathology	0.53 m long from top of skull to lower ribs, 0.41 m wide (shoulders)
34.	19-9	BE19-125	Poorly preserved burial, facial part of skull strongly crushed. Missing feet	1.65 m long if measured along long bones, 1.45 m if from top of skull to end of feet, 0.36 m wide (shoulders), 0.32 m (pelvis)
35.	19-10	BE19-125	Poorly preserved because of the salt, skull crushed, no bones below the knees preserved	1.10 m long, 0.41 m wide
36.	19-11	BE19-125	Poorly preserved bones	
37.	22-1	BE22-149	Almost complete (missing face part of skull), overall poor preservation. friable because of saltiness of sand	1.64 m long, 0.37 m wide (at shoulders and pelvis)
38.	22-2	BE22-149	Almost complete, missing feet and the left lateral part of skull (because the highest part), very poor preservation	1.74 m long (from top of skull to ankles), 0.37 m wide (shoulder), 0.36 m (pelvis), thigh bones 0.47 m long Adult(?)
39.	22-3	BE22-149	Poor preservation of bones, skeleton complete except for right side of skull (because turned up) and missing toes	1.62 m long from top of skull to midstep, 0.36 m wide (shoulders and pelvis) Adult(?)
40.	22-4	BE22-149	A few very friable and destroyed bones, impossible to identify	
41.	22-5	BE22-149	Very poorly preserved because of heavily concreted sand, powdered bones; skull missing, most probably also feet missing	1.40 m (from clavicle to ankles), 1.40 m wide (shoulders), 0.37 m wide (pelvis)
42.	23-1	BE23-153	Skeleton well preserved, missing bones of hand and feet	1.60 m long, 0.40 m wide at the shoulders, 0.32 m at the hips Adult(?)
43.	23-2	BE23-153	Skeleton very well preserved, complete	1.80 m long (with extended feet), 0.34 m wide at the shoulders, 0.30 m at the hips Adult

Body position	Arms & hands / legs and feet	Skull (with orientation)	
Anatomical; supine	Arms by the body, forearms and hands on pelvis	Skull to southeast, resting against the edge of the grave pit in almost vertical position	31.
Anatomical; supine	Arms by the body, forearms and hands on pelvis	Skull to southeast, facing north, resting against the edge of the grave pit	32.
Anatomical; supine		Skull to west, facing north	33.
Half on the back and half on the right side	Arms crossed on the chest, too disturbed to tell which one on top. Legs partly flexed	Skull to northwest, facing up	34.
Anatomical; supine	Arms by the body, forearms and hands by the sides. Legs straight	Skull to southwest	35.
			36.
Anatomical; supine	Right arm and hand by body, left one by the body; forearm and hand on pelvis. Legs slightly flexed	Skull to northeast	37.
Anatomical; supine	Arms by the body, forearms and hands on pelvis	Skull to southeast, facing northeast	38.
Anatomical; supine	Arms by the body, forearms and hands on pelvis	Skull to southeast, facing up	39.
Disturbed			40.
Anatomical; supine	Arms by the body, forearms and hands by the sides	Skull to north	41.
Anatomical; supine	Arms by the sides	Skull to northwest	42.
Anatomical; supine	Arms by the sides, hands on the pelvis; legs fully extended, left foot crossed on top of the right one	Skull complete with mandible, to north, facing east	43.



and one 18 year old [Table 3:96-3, 15-3, 96-2, 96-10]. Eleven more skeletons were measured; they can also be considered as adults based on the estimated stature. Two children were noted among the remains, one specifically aged 6–9 years (very fragmentary skeletons; Table 2: 96-5, 96-7). An infant skeleton recovered from a trench in the town area is thought to have been born premature [Table 3:96-1].

As regards the sex of the excavated remains, two skeletons have been determined to be female [Table 3:96-3, 15-2]. In eight cases, a tentative identification of the adult skeletons as male was proposed [Table 3:01-5, 01-6, 13-1, 13-2, 14-1, 15-1, 15-3, 19-4].

In most cases after 2012, measurements of the bones were taken in field conditions, once the excavated skeleton had been brushed clean. This is obviously sub-standard documentation, especially as done for the most part by a non-specialist, but it does give some idea of this particular buried population. Post-excavation measurements of the skeleton are available for 24 burials. The estimated stature of most of the individual skeletons is between 1.60 m and 1.70 m, with a handful being appar-

ently very tall – about 1.80 m (although the field measurements as recorded are not comparable well enough) [Fig. 12]. The very tall deceased included one of the two headless skeletons which measured 1.80 m without the head, meaning the individual could have been even 2.00 m tall and a female skeleton from the central cluster, measuring 1.80 m [Table 3:01-5 and 15-2 respectively]. Two others were probably at least 1.80 m tall, if the missing feet are added to the measured length of the skeletons [Table 3:22-2 and 23-2 respectively]. At least eight of the skeletons demonstrate an estimated stature of around 1.70 m (tall), six were more than 1.60 m (medium) and six between 1.30 m and 1.55 m (short/growing). Overall, in this sample, approximately half of the buried individuals could be considered as tall or very tall (up from 1.70 m).

The state of preservation of the skeletons for the most part precluded a detailed study of the bones, even had a physical anthropologist been present on site at the time of excavation. Therefore, data characterizing this population is available mainly for the skeletons uncovered in the 1996 season, which were studied by human bone specialist Hans Barnard. Consequently, the best known are two skeletons, one of a male in his prime and the other of a middle-aged female [Table 3:96-2 and 96-3 respectively]. The male was described as having “quite sturdy bones with pronounced plates of tendon insertion, indicating a once muscular individual” (Barnard 1998: 392 and Pl. 18-8 at top of page). As for the female, she had a pronounced overbite with the incisors of the maxilla pointing forward at an angle of about 45° from their normal vertical position” (Barnard 1998: 392 and Pl. 18-4). This

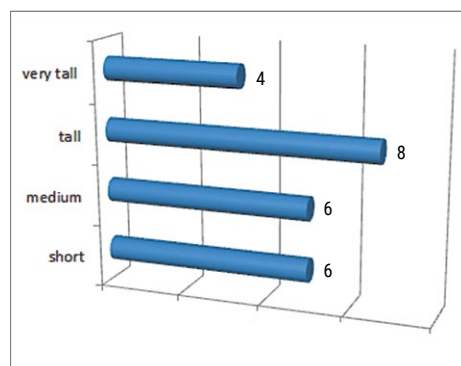


Fig. 12. Height categories for the burial population from early Roman times in Berenike ( $n=24$ )

would have caused her serious dental and parodontal disease in life. The presence of two mental foramina in the left side of the mandible, which occurs apparently in 17% of the general population, could have been the cause of neuralgic pain. Otherwise neither of these two individuals demonstrated any visible pathological changes of the bones. A sturdy appearance of the bones was observed also in the case of two adult skeletons (crossing graves *Table 3:19-7* and *19-8*; see *Fig. 4*); the earlier of the two burials, *19-8*, demonstrated a difference in the massiveness of the disturbed leg bones, with the left one apparently bigger than the right one, the knee part clearly flat and more massive, possibly pathological.

Last but not least, one wonders whether the missing toes, feet and lower legs, occasionally hands and heads, are simply the effect of poor preservation.

While there is one case of evident disturbance, one of the feet gnawed at perhaps by rodents or carnivores of some kind [*Table 3:01-5*], this cannot in truth explain all cases of missing extremities: three skeletons without toes [*Table 3:15-2, 19-5, 22-3*], six without the feet [*Table 3:11-1, 14-1, 19-6, 19-9, 22-2, 22-5, 23-1*], three without the legs below the knees [*Table 3:13-1, 19-2, 19-10*], one missing the hands [*Table 3:23-1*]. Three of the skeletons were headless and this surely could not be entirely accidental [*Table 3:01-5, 01-6, 22-5*].

To complete the description, one should also mention a collection of loose bones found in sand layers overlying the burial in trench BE96-11. These were studied by Barnard and identified as belonging to different individuals (at least four, including two children, an adolescent and an adult; Barnard 1998: *Table 18-1*).

## PERSONAL (RITUAL?) ACCESSORIES, SHROUDS AND GRAVE GOODS

### SHROUDS

Evidence of presumed shrouds has been recorded in eight cases. These are streaks of dark brown and black that are discerned next to and on the bones, especially between the legs, generally outlining the body. In the case of the coffin burial (*19-4*), this substance appears as a rectangular dark brown shape over the skeleton. A thick layer (perhaps even layers) of a black substance appears to have covered the whole body, but not the head, of the individual buried in grave *15-3* [*Fig. 6* bottom]. The covering substance over the body in grave *19-5* also appears as a thick enveloping feature. Graves with evidence

of organic substances interpreted as burial shrouds are found more than once in each of the grave clusters in the central part of the cemetery: in *19-5* beside the coffin burial, in the middle cluster in graves *15-3, 23-1, 23-2*, and the satellite burial of *96-3*. Finally, on the bones of *22-3* and far to the south, in burial *01-4* [*Table 4: shrouds*].

### PERSONAL ADORNMENT AND INSIGNIA

The presumed shroud enveloping the body of the older male in grave *15-3* was instrumental in keeping in place two long strings of beads which he had around his neck [*Table 4:15-3* personal adorn-

Table 4. Listing of burials with shrouds, personal adornment, weapons and insignia, coins and ritual(?) accessories

Grave No.	Trench/season	Shrouds
1.	96-3 BE96-11	Apparently wrapped in a shroud, "deemed" to be ancient; one piece stuck to the right scapula
2.	01-4 BE01-45	Apparently wrapped in a shroud.
3.	15-3 BE15-104	Thick layer of a black deteriorated substance, possibly a thick, many-layered(?) shroud covering the skeleton (but probably not the head).
4.	19-4 BE19-125	Rectangular dark brown shape over the skeleton, possibly a thick, completely disintegrated shroud(?).
5.	19-5 BE19-125	Thick shroud wrapped around the body.
6.	22-3 BE22-149	Dark brown traces on the bones, probably thick disintegrated shroud (observable especially on the upper part of the skeleton).
7.	23-1 BE23-153	Dark brown traces outlining the body, interpreted as a shroud; no grave goods
8.	23-2 BE23-153	Dark brown and black streaks next to the bones and especially between the legs, interpreted as a shroud; no grave goods
Grave No.	Trench/season	Personal adornment, weapons and insignia
1.	15-1 BE15-104	Iron ring with key on left hand; no grave goods as such.
2.	15-3 BE15-104	Personal adornment: long bead necklace (black-grey agate, carnelian, amethyst, glass(?); iron key ring on thin metal chain.
3.	19-4 BE19-125	Bronze <i>aes</i> coin, Alexandrian mint, 1st century CE, in the fill near the abdomen. Silver ring with a carnelian gemstone carved with the image of a standing semi-nude man with a long staff in hand [Fig. 14].
4.	19-5 BE19-125	Small, heavily corroded iron blade (about 10–12 cm long, 3 cm wide, straight, too corroded to tell whether one- or two-sided, handle of an organic material, probably wooden, completely disintegrated) [Fig. 14].
Grave No.	Trench/season	Ritual(?) accessories
1.	96-1 BE96-7	Single <i>aes</i> bronze coin from Alexandrian mint, struck before 296 CE in the fill, hence not necessarily related to the skeleton
2.	96-3 BE96-11	Large potsherd placed over the genital area; no grave goods.
3.	00-1 BE00-36	Shell over the pelvic area (intentional?); no grave goods.
4.	12-2 BE12-85	Bottom part of amphora with toe (40 cm long) by the jaw of the skeleton; no grave goods.
5.	15-2 BE15-104	Large amphora sherd (lower part with bottom), used to cover the face and head; early Roman date. Flat, apparently elongated pentagonal object (yellowish stone?; 10 x 6 cm) on the abdomen or pelvis; no grave goods [Fig. 13].
6.	18-1 BE19-125	Skull fragment inside an early Roman amphora cut to shape.
7.	19-1 BE19-125	Roughly circular gypsum stone on the abdomen, off center; no grave goods [Fig. 14].
8.	19-4 BE19-125	Single <i>aes</i> bronze coin from Alexandrian mint, 1st century CE, in the fill near the abdomen of a disturbed skeleton; grave goods.
9.	19-9 BE19-125	Single <i>aes</i> bronze coin from Alexandrian mint, struck before 296 CE, to the left of the pelvis, in fill; no other grave goods.
10.	22-1 BE22-149	Above clavicle, across neck, large fragment of the body of an amphora, possibly covering the face.
11.	22-3 BE22-149	Triangular amphora body sherd on the pelvis; large pottery fragment under the head, perhaps from the ceramic covering destroyed together with the skull.

ment...; see *Fig. 6*; see below, *Fig. 14*]. Several dozen beads were made of glass, gold-in-glass and semiprecious stones, the latter including truncated bicones of amethyst, long onyx barrels, globular, biconical and irregularly shaped red agate. The glass beads included mosaic banded examples and ones with mosaic “eyes”. These and the gold-in-glass specimens were definitely produced in Roman Alexandria, while the agate beads were perforated using the Egyptian or Nubian technique. The arrangement of beads on the two strings was the same: large onyx beads alternating with many small ones made up of amethyst or agate bicones alternating with glass and gold-in-glass beads (Then Obluska 2018: 209–211, *Fig. 4*). An iron ring with key attachment was strung onto one of the strings and lay on the shoulder, alongside the skeleton's neck. In view of the prestigious character of these personal adornments, it would be logical to assume that the body was dressed in some robes as well as possibly wrapped in a shroud. However, nowhere in the burials was there any scrap of textile recorded, apart from the streaks of disintegrated organic substance discussed above.

An iron ring with a key attachment, a common find on Roman sites in Egypt, was found on the middle finger of the left hand of a male buried in too small a pit in the same cluster as the man with the strings of beads [*Table 4:15-1*; see below, *Fig. 14*].

Rank and status are clearly reflected in these accoutrements of everyday business life in Roman Egypt, and the manner of burial a sign of being well-to-do, at least when traveling. The male with the strings of beads is one of only two

burials where the body was intentionally laid on the right side, the legs slightly flexed, the head to the west and looking in a generally southern direction. The other burial is quite the contrary: a fairly big individual forcibly fitted in a grave pit way too small, with the knees pulled up strongly, one foot in the grave pit, the other extending beyond the pit. Regardless of whether the grave pit here could have eroded so substantially or whether the body had been covered with a now fully-eroded superstructure of some kind, this was hardly a prestigious burial.

Just about 15 m northeast of these two burials, in the northeastern cluster, the presumed adult male individual buried in the coffin had a silver ring with a red (carnelian) intaglio carved with the image of a standing semi-nude man with a long staff in hand [*Tables 3, 4:19-4*; *Fig. 14*]. Such jewelry in this period is an even greater mark of status and privilege, a visible sign of wealth, social standing and gender; rings of this kind were used to seal and authenticate letters and transactions, hence we must be dealing here with a man of substance, an official perhaps connected with the Roman army, and if not, then at least a man possibly born into the Roman way of life. Moreover, the ring is also a good chronological marker, placing this particular burial in the period from the Augustan era through the 2nd century CE.

An adjacent burial from this cluster, aligned in the same direction and with the head to the west, was of a presumed adolescent (1.34 m estimated stature). The skeleton lay extended, on the back, hands on the pelvis. It was furnished for eternal life with a small iron blade, 10–12 cm long, presumably with a now lost wooden

handle [Tables 3, 4:19-5; Fig. 14]. The blade lay by the right hip, suggesting that it may have been somehow strapped at the waist with a now completely disintegrated organic material.

### RITUAL(?) ACCESSORIES

Fragmented potsherds, stones and possibly shells have been found in connection with seven burials, two of which have been determined to be female. The older, 40–50 year old female was found with a large amphora body potsherd placed over the genital area [Tables 3, 4:96-3 ritual(?) accessories...]. The other female, presumed to be rather younger, had the body and bottom part with toe of an early Roman amphora placed over her face and head in a manner akin

to the portrait masks known from the Late Period, Ptolemaic and early Roman Egyptian burial customs [Tables 3, 4:15-2; Fig. 13].

A similar amphora sherd—the lower part with the toe, 40 cm long—was found by the jaw of another skeleton in the one grave that preserved more or less complete remains of a superstructure [Tables 3, 4:12-2]. A fragment of an amphora body sherd was found by the clavicle and neck of an adult individual of medium stature; it may have covered the face of this deceased [Tables 3, 4:22-1]. A burial with just the skull preserved inside the remains of an amphora may also exemplify this practice of covering the face or whole head with a fragmentary pottery vessel [Table 4: 18-1]. A large potsherd, found under



Fig. 13. Ritual(?) accessories: above, stone on pelvic area (19-1); right, female burial with pentagonal stone on pelvic area and bisected amphora bottom part covering the face (15-2) (Berenike Project | photos S.E. Sidebotham)



the skull of another burial in this cluster [Tables 3, 4:22-3], could belong to a vessel covering of the head. This particular burial also had a triangular amphora sherd covering the pelvic area [Fig. 13].

In terms of shared burial characteristics, the burials with potsherds seem to have had the head generally to the west (the 22 series), and were laid to rest in a supine position, the forearms, either both or one, folded on the pelvic area or extended by the sides. They seem to have been of medium stature with the exception of one, clearly among the tallest in this assemblage.

A skeleton buried in fetal position in a pit dug in the remains of a water tank may have had a shell associated with the pelvic area; there is, however, no further data or illustration of this find [Tables 3, 4:00-36].

In two instances, a stone had been placed on the abdominal part of the skeleton. One of the two was the tall female from grave 15-2 with an amphora covering her face [Tables 3, 4:15-2; Fig. 13]. The stone was flat, somewhat like an elongated pentagon in shape (10 cm by 6 cm), not worked in any way, of a yellowish color. In the other case, a roughly circular gypsum stone was found in the abdominal area of a medium-statured individual, presumably an adult, with the head to the southwest and forearms and hands folded on the pelvis [Tables 3, 4:19-1].

In none of these burials were there any grave goods found with the skeletons.

In a different order but still presumably in the symbolic sphere, bronze Roman *aes* issues, too worn and eroded for

closer identification except that they were struck in the Alexandrian mint before 296 CE, were discovered in three different burials. In the case of an adult burial, somewhat disturbed, the coin lay near the pelvis of the skeleton, in the fill. The same situation was encountered in the case of the individual buried in a coffin [Table 4:19-9 and 19-4 respectively]. In the third instance, it was found in loose association with an infant burial found in the town area [Table 4:96-1].

### POTTERY GRAVE GOODS

Interestingly, the only grave goods ever found with these burials occurred in the northeastern cluster, in graves of the 19 series, all situated on the northwestern slope, the heads of the skeletons to the west or south, hence looking either east or north. One of these graves is the burial in a wooden coffin.

The pottery that was discovered in five different graves is made up of tableware forms intended for pouring, storing and drinking liquids [Table 5; see Fig. 14].<sup>3</sup>

- 1) small beaker, terra sigillata with fine thin walls, 1st century BCE/1st century CE,
- 2) small red-slipped semicircular bowl, 1st century BCE/1st century CE,
- 3) glazed lekythos with wooden bung, end of 1st century BCE/1st century CE, considered an Oriental(?) import (pictured also *in situ*; see Fig. 14),
- 4) small red globular vessel, closed with the toe of an early Roman amphora (pictured also *in situ*; see Fig. 14),
- 5) small plain *amphoriskos*, 1st century CE (pictured also *in situ*; see Fig. 14),
- 6) large biconical liquid strainer with

3 Cordial thanks to Dr. Krzysztof Domżański (Institute of Archaeology and Ethnology, Polish Academy of Sciences) for consulting this material.



Fig. 14. Selected grave goods from the burials: top, *in situ* documentation of vessels from the extended grave pit 19-4, ceramic vessels accompanying crossing graves 19-7 and 19-8, necklaces and key ring on the enshrouded body in burial 15-3 and iron key ring on the left hand of the individual buried in grave 15-1; bottom, selected ceramic vessels, iron knife, iron ring with intaglio, and Roman bronze coin (Berenike Project | photos S.E. Sidebotham, K. Braulińska)

spout and small vertical loop handles (for water? wine?), 1st century CE (pictured also *in situ*; see *Fig. 14*),

7) pilgrim's bottle (flat amphora), most probably first half of the 1st century CE.

The graves were furnished with either one, two or three vessels. When only one vessel is present, it is a small bowl, like the one placed close to the right hip of an adolescent boy [*Table 3, 5:19-5*]. The case of the single pilgrim's bottle is uncertain, as the grave was not wholly excavated [*Tables 1, 5:19-11*]. In any case, the bottle was found at the head end of the grave pit. The strainer and amphoriskos were a pair that may have even served two burials in quick succession. Since grave 19-7 was dug into an earlier grave 19-8 at right angle, the vessels (or at least one vessel) may have “ascended” to the later (probably not much later) burial [*Tables 1, 5:19-7 & 19-8*]. They were found on either side of the pelvis of the skeleton that was buried later, disturbing the earlier interment. Finally, the richest of the lot, the burial with a coffin that had the lekythos and stoppered globular jar at the foot end of

the coffin and a two-handled beaker in the fill of the gravepit outside the coffin [*Tables 1, 5:19-4*]. Save for the adolescent in grave 19-5 (and the skeleton in grave 19-11 which was not fully explored), the other three burials belonged to individuals that could be said to be adults of a stature estimated between medium and tall.

## COFFIN

The coffin discovered in grave 19-4 [see *Table 1*] was a rectangular wooden box with walls made of boards about 3 cm thick. The wood was preserved in totally powdered form, enough to trace the outline. There seems not to have been a lid, unless the “rectangular dark brown shape over the skeleton” observed in the archaeological documentation of the excavation, was actually this lid. The outside dimensions of this box were 1.78 m in length and 0.52–0.58 m in width, widening toward the head end at west, with an approximate depth of 0.45 m. The width of individual planks could not be established and there is reason to think that more than one species of wood was used. At least 15 iron nails,

Table 5. Listing of burials with pottery grave goods

Grave No.	Trench/season	Pottery grave goods
1.	12-2 BE12-85	Two fragments of an amphora, much deteriorated, and a white mortar stopper, found at the eastern edge of the grave pit (possibly intrusive).
2.	19-4 BE19-125	Two well preserved ceramic vessels by the feet: glazed lekythos with wooden bung, end of 1st century BCE/1st century CE, considered an Oriental(?) import; and small red globular vessel closed with an Early Roman amphora toe.
3.	19-5 BE19-125	In the fill of the grave pit outside the coffin, a small, red, two-handled beaker, 1st century BCE/1st century CE [see <i>Fig. 12</i> ].
4.	19-7 BE19-125	Small terra sigillata semicircular bowl/cup in very good condition, 1st century BCE/1st century CE, close to right hip.
5.	19-8 BE19-125	Large biconical water strainer with spout and small vertical loop handles (for water?), 1st century CE; possibly also small plain amphoriskos, 1st century CE (most probably associated with this burial) [see <i>Fig. 12</i> ].
6.	19-11 BE19-125	The two vessels from 19-7, either together or individually, may have been reused from the earlier grave.
		Broken pilgrim's bottle (flat amphora), most probably first half of 1st century CE.



5–6 cm long, were used to fix the sides to the bottom, alongside wooden pegs applied on the coffin sides. Thanks to wood from the boards of the coffin that was rusted to

the iron nails, it was possible to reconstruct the box as well as to identify at least these parts as teak (archaeobotanist Dr. Claire Newton, personal communication, 2019).

## BURIAL PRACTICES IN EARLY BERENIKE

### DISCUSSION

The incidental nature of discoveries of early Roman burials in Berenike over the last quarter of a century, faced with other finds, at the time more interesting, has resulted in the subject being reported and summarized but not analyzed (Sidebotham et al. 2008; Sidebotham 2011; and most fully 2014; for reports in chronological order see Sidebotham 1998; Sidebotham and Zych 2016; Sidebotham et al. 2019; 2020; 2021). The material collected in this study, supported by the early study of skeletal remains from the 1996 season (Barnard 1998), provides the first opportunity to examine the burial practices of the population that interred its dead in Berenike in the early Roman period.

Before considering the burial practices as such, a few remarks are in order concerning the make-up of the Berenike population in this period, because, as Sidebotham (2014: 622) aptly notes, burial practices reflect ethnicities and religious proclivities of the deceased. Excavations of the town have so far yielded evidence, both archaeological and written, of the presence of the so-called Trog(l)odites/Trogodytes, Ichthyophagoi (who may have been indigenous to the Berenike sea coast) as well as peoples indigenous to the Eastern Desert, Nubia and Meroe, the Blemmyes, Greeks and Romans, Egyptians, and also the Axumites, Arabs and travellers from South Asia (e.g.,

Sidebotham et al. 2008; Sidebotham 2011, 2014: 624–627). Epigraphic evidence, ostraca documents and inscriptions, confirm an official Roman army presence, including a *schola* of Palmyrene (Syrian) auxiliary troops and merchants residing at Berenike (Sidebotham and Wendrich 2001–2002: 93). Yet none of the burials excavated to date could be assigned with any certainty to a specific ethnicity and in many cases the dating remains speculative. It is to be expected that those who called Berenike their home would be interred on the spot. As for the foreigners—officials, merchants, sailors, soldiers, adventurers, slaves—one can only surmise that the fate of their bodies, had they died at Berenike, depended on factors like individual wealth and practicality of undertaken solutions. Deceased Egyptians (and presumably Roman citizens) would have preferred to be taken home for burial as indicated by the Coptos Tariff of 90 CE, which lists tolls levied on bodies transported from the Eastern Desert to the Nile (see, e.g., Sidebotham 2014: 624 with references). For some either the cost would have been prohibitive or there was nobody to expedite the matter. However, there is little reason to think that in such cases the local undertakers would have gone out of their way to accommodate the sepulchral preferences and practices of “outlanders”.

That is, unless the deceased belonged to resident communities large enough to take care of their own.

The personal adornments and pottery grave goods recovered from the burials indicate a period roughly covering the end of the 1st century BCE and the beginning of the 1st century CE, at least for the two clusters in the central part of the burial zone that seems to have extended around most of the site on the landward, westward side. The pottery is of Augustan date (K. Domżański, personal communication), both the signet rings are of 1st-century CE form, and the Roman *aes* coins, although too worn to be identified, sit well in the 1st century CE. Also the amphora sherds used for ritual purposes in the burials are believed to be of early Roman date, in the 1st century CE rather than later (R. Tomber, personal communication). This sets a clear chronological horizon for the burials, even if barely a quarter of the explored graves have yielded any dating evidence. A relative chronology is difficult to establish in the specific circumstances of these graves, the one example of a second grave disturbing an already existing grave being apparently a special case. The two or three other instances of newly dug grave pits breaking into earlier graves are apparently circumstantial. All that can be said is that the graves encroaching upon earlier pits are all oriented more or less north–south.

From an urban perspective, in the later part of the 1st century BCE the western plateau in Berenike was a wasteland serving the town on the eastern promontory as a ready source of gypsum/anhydrite stone blocks for building purposes. The overall impression from years of excavations on

the site is that most of the structures from the Ptolemaic period (outside of the main town mound which has not been sufficiently excavated at these early levels) were dismantled and the good stone reused in new structures on the main city mound or in its vicinity. From personal experience, the authors are also aware that given the wind patterns any ruins or trenches in the ground are easily filled with drifted sand or else with deposits left by the flash floods apt to occur in extremely rainy winters, when the water comes down the wadis from the mountains of the Eastern Desert; hence the indigenous custom of burying the dead on higher ground to avoid the effects of this phenomenon. The western plateau in Berenike with its stony bedrock right under the surface was not explicitly high ground, but it could have been enough—especially in its westernmost part where the late (4th-through-6th century CE) formal cemetery was located—to protect the graves from most natural catastrophes of this kind.

Faced with this kind of landscape, the gravediggers appear to have taken advantage of any place among the stone remains of structures that offered easy digging, for instance, the soft fill of a water tank, the sand drifted into the spaces of the Hellenistic bathhouse, trenches left by the salvaging of building stone. The evidence for protective superstructures is very slim, yet it seems beyond question that some form of tomb marker existed. It was most likely loose stones set up in a mound over the grave pit. Perhaps the gnawed foot of one skeleton and the rampant missing toes, feet and lower parts of the legs are an indication of the ineffectiveness of this covering. The poor state of

preservation of the bones in many cases and the frequent crushing of the skulls, which were closest to the surface, would also indicate strong erosion processes, leaving many of these graves barely a few centimeters below the ground surface.

The orientation of the graves is not uniform; indeed there is enough deviation from any one direction to indicate that it was not obligatory in any way. This can be explained by the described circumstances of burial within the ruins of earlier structures, but it can also mean that this population did not have preferences in this regard. A closer look at the central part of the burial zone, where a larger group of graves was discovered, suggests, however, a clustering of the graves in separate sets, which could reflect societal or familial divisions. Interestingly, both the northeastern and the central clusters [see *Fig. 2*] include one “special” grave: the man with a signet ring buried in a coffin in the first one (19-4) and the man with strings of beads and a ring with a key in the second (15-3).

The overall tendency is toward an extended burial with hands placed on the pelvis, but there are some with the arms and hands by the sides. Heads are for the most part left facing up (very few cases of a skull found on the side). Legs may be flexed, although this is more often than not the result of fitting a long body into a grave pit too small for it. In a number of cases, it also results in the head actually leaning against the end of a pit. One skeleton had a stone slab under the head, but it was buried in a completely different, fetal position, hence cannot be considered as following a rule. It is impossible to be sure how intentional

this custom could have been. Equally so, the practice of covering the pelvic area with a potsherd and placing the bottom part of an amphora, often intentionally cut, over the face and head, sufficiently frequent in this set to be noticed, cannot be considered as common practice. Two of the cases of such ritual(?) protection concerned females and the other examples were all adults, who could have been females, but this determination has to remain speculative. While covering of the head of the deceased with a potsherd was a fairly common practice at this time in this part of the world, the stone on the pelvis suggests female burial rites that could be a clue to the social background of the deceased (for a discussion of analogous practices in 2nd-century CE Palmyra see Saito 2013). An amphora bottom containing a very decayed female skull, found in the general area of this cemetery, could have belonged to a disturbed burial, although the circumstances of its discovery could suggest some form of magical practices. Interestingly, in three cases the bodies seem to have been decapitated. Perhaps the missing heads were used in some kind of ritual. The excavators’ initial interpretation that these were beheaded criminals does not find grounds in Roman law (A. Lajtar, personal communication).

There is some evidence of shrouds being used and the personal adornments recorded in a few cases lead to the logical conclusion that the bodies had been dressed. However, nothing of the kind has survived. The wooden coffin is an apparent anomaly, there being no other example of the use of boxes or containers of any kind. The position of the body inside the coffin shows that the coffin was tipped

over before being deposited, hence it could mean longer transport in this case. The teak wood used in the making of the coffin would have been available in the port, but the commissioning of this box was singular. Indeed, perhaps it was a box used as a coffin rather than a coffin by design. The accoutrements of this burial as well as of the neighboring burial of an adolescent, interred with apparently a favorite knife, make these two burials—as well as the cluster of which they are part—stand out. Perhaps they represented an elite group

in the Berenikan community, not part of the indigenous population but established long enough to be buried here. Or else a part of the population resident in the city, fairly wealthy and with aspirations to a Greek lifestyle, making a living trading with and for the new rulers of Egypt.

Last but not least, this was a population that was rather tall on the whole, considering that about half of the excavated burials were of people 1.70 m and taller, with one individual possibly even 2.00 m tall.

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**How to cite this article:** Zych, I. and Woźniak, M.A. (2022). An early Roman burial ground in Berenike on the Red Sea coast of Egypt. *Polish Archaeology in the Mediterranean*, 31 (pp. 245–284). <https://doi.org/10.37343/uw.2083-537X.pam31.11>

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