

Deviant burials from Rakvere, Põlva and Tartu

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INTRODUCTION

The term 'deviant' for describing a burial is commonly used when the discovered human remains lay in a different position from what is considered normal for the burial traditions of a certain period and population group. As the supine position was the common burial custom through the Medieval and Early Modern Period, skeletons found in any other position can be seen as deviant. Double burials and mass graves are also considered to be abnormal and indicate that numerous individuals have died at the same time as a result of famine, epidemic or violence. The rescue excavations in Estonia during the spring and summer of 2019 revealed three different burial sites, where evidence of non-normative burial practices was found. Five burials were unearthed in Rakvere during the reconstruction work of Pikk street (Malve 2020a). A triple burial of one adult and two subadults was found in St Mary's churchyard in Põlva (Malve 2020b). Lastly, a mass grave of 13 skeletons was discovered during reconstruction work of the building of the Supreme Court of Estonia in Lossi street, Tartu (Vilumets & Malve 2020). The cases discussed in this paper may be considered extraordinary due to their location, number of individuals, burial manner or the nature of injuries and their analysis provides insights into the burial practices of past societies.

EXECUTION VICTIMS FROM RAKVERE

In spring 2019, human remains were found at Pikk street in Rakvere, ca. 200 metres south of the St Michael's churchyard during road reconstruction. The location of the burials was unexpected, as the burial place lay outside the churchyard. After closer inspection of the burials it became clear that this had been the burial place for the individuals who had been executed.

Burials

Four *in situ* burials (nos 1–4) were found, but only one of them was preserved in its entirety. The burials had been damaged by previous roadwork. The fifth skeleton (no 5) was collected from the mixed material. In addition, one adult axis (second vertebra) with cut marks was discovered, but it was impossible to match it with any of the five individuals mentioned above.

All the individuals were in a supine-extended position and buried without a coffin. Three of them were buried with their head towards the west, while the fourth was situated with its head towards the north-west. Finds were discovered only with burial no 2, an adult male



Fig. 1. The excavated burial no 2 with iron belt rings on his pelvis.

Jn 1. Matus 2 väljapuhastatuna, puusaluude juures on näha rauast vöörõngaid. Photo / Foto: Martin Malve had three iron belt rings on his pelvis (Fig. 1). All the unearthed executed individuals were buried without any grave goods, which also makes exact dating of the burials very difficult. The graves were found right underneath the modern road and sidewalks and cannot be dated based on stratigraphy. The location of the graves allows stating that the burial ground was located outside the borders of the Medieval and Early Modern Period town, as the St Michael's churchvard marked the southern end of the town (Alttoa 2019, 121). The graves were discovered in a 12 m² area. Burials were situated scarcely in one layer and no later burials occurred. Burials no 2 and 3 were close together, burials no 1 and 4

were 3–4 m away from the other two. There were no signs of any additional graves in the area, although there may have been more burials that might have been destroyed by earlier road and construction work.

Human remains

The analysed skeletons from Rakvere included three males, one possible male and one individual of unknown sex.¹ All the buried were adults between 25–44 years of age.

The most common pathologies registered were dental calculus and caries (nos 2, 4). Three males (nos 1, 4, 5) had healed rib fractures and one (no 2) had a healed depressed cranial fracture. Two individuals (nos 2, 5) had signs of periostitis on their tibiae.

What makes the burial place stand out is the amount of violence-related traumas found on the skeletons. Besides the single axis with cut marks found from the commingled material, the analysis showed that three of the four individuals had unhealed injuries on their cervical area from bladed weapons (e.g. sword or sabre). The wounds were long, straight, and narrow, V-shaped and with smooth edges.

A 25–40 years old male (no 1) had three cut marks on the posterior side of the cervical vertebrae. The blade had struck the second and third cervical vertebra, resulting in the second cervical vertebra to be sliced diagonally in half. Another strike had diagonally sliced the left side of the fourth cervical vertebra. With another hit, the blade penetrated between the seventh cervical vertebra and the first thoracic vertebra (Fig. 2), cutting off the seventh vertebra's spinous process and the body and upper part of the transverse process of the first thoracic vertebra. The same blow also removed acromia of the scapulae (Fig. 3) and also hit the posterior part of the left humerus and clavicle (Fig. 4). Burial no 1 is a rare example showing that the cut marks were left on the skeleton from multiple blows. The analysis of the injuries of executed individuals usually indicates that the cut marks are the result of a single hit. One of

¹ The sex of the buried individuals was determined according to the morphological traits of the pelvis and cranium (Buikstra & Ubelaker 1994, 16–20), the maximum length of the long bones (Garmus & Jankauskas 1993, 6–8), and the tarsal bone length (Garmus 1996, 2). The age at death was determined according to tooth wear (Brothwell 1981, 72), pubic symphyseal face (Todd 1920; 1921; Brooks & Suchey 1990), and degenerative changes of the limb joints (Ubelaker 1989, 84–87). The age of subadults was determined by examining the development and eruption of the teeth (Ubelaker 1989, 63) and epiphyseal fusion (Schaefer *et al.* 2009). Pathological conditions were identified with the aid of Ortner & Putschar (1985) and Roberts & Manchester (2012). Stature was calculated according to the formulas of Trotter and Gleser (Trotter 1970), using measurements of the right femora. The same methods were used in all three burial grounds.

the examples is an executed man found from the Tartu Cathedral, whose head was cut off with a single blow (Malve 2011).

Two other males' (no 2, 4) injuries show that the used technique had been neater. The cut marks demonstrate that both of them had been struck from behind. Male no 2 had an injury on the fifth cervical vertebra, of which the bottom part and the right side were cut off. This resulted in a complete detachment of the head of the victim. In the second case (no 4), the blade had diagonally cut through the first cervical vertebra (atlas) and both of the mandibular condyles. In two cases (nos 1, 4) the head was not displaced from the correct anatomical position, which makes it possible that the head was not fully detached.

The presented cases do not have multiple cuts to the head and the body, so the motives for execution as a result of an armed conflict might be excluded. It is also worth noting that beheading was more commonly used to execute victims of high rank so it is possible that these men had high social positions (Wiltschke-Schrotta & Stadler 2005, 58).

A TRIPLE GRAVE FROM PÕLVA

The 2019 archaeological excavations are so far the biggest that have taken place at the St Mary's churchyard in Põlva. Previously, during the excavations in 2008 (Bernotas 2009), not a single human bone nor a find were discovered. In 2019, a triple grave was discovered only 25 cm deep in the ground. The Russian coin discovered in the grave indicates that the remains date back to the middle part of the 18th century.

Burials

During the excavations it was discovered that one adult and two children were buried in the same grave (Fig. 5). The adult (no 2) was in a separate coffin, while remains of the children (nos 1 and 3) were right next to each other and their bones had moved during the



Fig. 2. The blow had sliced the first thoracic vertebra (burial no 1).

Jn 2. Läbiv lõikejälg esimesel rinnalülil (matus 1). Photo / Foto: Janika Viljat



Fig. 3. The acromion of the left scapula was cut off (burial no 1).

Jn 3. Vasaku abaluu õlanukk oli löögi tagajärjel eemaldunud (matus 1).

Photo / Foto: Janika Viljat



Fig. 4. A fragment of the lateroposterior side of the left clavicle had been cut away (burial no 1).

Jn 4. Vasaku rangluu külgmise osa selgmisel küljel oli ära lõigatud luu katke (matus 1). Photo / Foto: Janika Viljat



Fig. 5. Triple burial cleaned from the soil in the St Mary's churchyard, Põlva.
Jn 5. Avatud ühishaud Põlva Püha Maarja kirikaias.
Photo / Foto: Martin Malve



Fig. 6. Enamel hypoplasia on the crowns of the first and second deciduous molars of the maxilla (burial no 3).
Jn 6. Hüpoplaasia ülalõualuu esimestel ja teistel piimahammaste molaaride kroonidel (matus 3).
Photo / Foto: Janika Viljat

decaying process, which shows that the decomposition of the corpses had taken place inside an open space, i.e. a coffin. Probably for practical reasons, child no 1 had the head towards the west and child no 3 towards the east. All the buried individuals were in a supine-extended position. A Russian *denga* from the year 1739 was discovered next to the right shoulder of child no 1. The deceased were possibly relatives and had died together.

Human remains

The triple grave consisted of two subadults and an adult. The adult was a possible female over 45 years old (no 2). The older child was between 8–12 years (no 1) and the younger one was 5–9 years old (no 3). The height of the adult was 162.7 \pm 3.72 cm.

All individuals had dental diseases. Burial no 1 had dental enamel hypoplasia and a congenital abnormality – the left mandibular second premolar had erupted incorrectly. The possible female had signs of calculus, caries, *ante mortem* tooth loss and periapical lesions. Burial no 3 is quite remarkable, as the child had a big amount of dental diseases for such a young age. Different types of hypoplasia, both pits and grooves on the deciduous teeth enamel (Fig. 6) were registered. This is a condition which occurs when the growth of the dental enamel is interrupted, and is commonly linked to nutritional

deficiency and metabolic diseases (Goodman & Rose 1990, 59–60). The child also had caries and had lost a tooth *ante mortem*.

Skeletal pathologies were registered only on the adult individual, who showed a healed fracture on the right ulna and another healed injury on the right tibia. Age-related diseases such as osteoarthrosis on the limbs and spondylosis on the spine were also documented on the same individual.

A MASS GRAVE IN TARTU

The biggest deviant grave was discovered in Lossi St. 17 in Tartu. During the renovation work of the building of the Supreme Court of Estonia, a mass grave of 13 individuals was found (Fig. 7). The grave was found in the vicinity of the medieval St Peter and St Paul Cathedral, but outside the churchyard.

Burials

The grave of 13 burials was found 2.2 m deep from the present-day ground level. The first six burials were damaged during several instances of 19th-20th century construction work, and the remains of skeletons 13 and 14 were collected from the disturbed soil. All the deceased had been buried without coffins, which was determined by the position of the skeletons. Possibly due to fitting more bodies to the pit, the dead were buried both with their heads to the south (nos 2, 3, 8 and 15) and to the north (nos 1, 4, 5, 6, 7, 9, 10). Seven individuals (nos 2, 3, 4, 5, 6, 8 and 15) were in supine-extended position, while their hands were either crossed over their abdomen or were in straight and extended or in a flexed position by the thorax of the skeleton. While some of the individuals were buried in a traditional Christian manner (nos 2, 4, 6, 8) as stated above, others were in a position indicating they were either thrown in the grave or placed there carelessly (nos 1, 3, 5, 7, 9, 10, 15). For example, one child (no 10) was buried in a prone position and another child (no 9) was laid to rest on the side, with legs and arms bent. One of the adults' (no 7) left leg was flexed and his right hand was positioned over his head.

As the skeletons from the superior layers were damaged by previous construction work, it is impossible to determine the exact order in which the deceased had been placed into the grave. The dead were buried in four layers. Firstly, burial no 10 was thrown into the grave, immediately followed by burial no 9 on top of it (Fig. 8). At the same time, burial no 7 was placed next to them, and burial no 8 was then put on top of the three. On top of the burials no 7 and 8, burial no 6 was placed (Fig. 9). Burial no 4 was put next to burial no 6. The torsos of the skeletons no 7 and 6 were right on top of each other, whereas 5 cm of soil was found between their legs. Additionally, burials no 2, 3 and 5 were



Fig. 7. Plan of the Tartu Lossi street mass grave.
Green – subadult, blue – male, red – female.
Jn 7. Tartu Lossi tn avastatud ühishaua plaan.

Roheline – alaealine, sinine – mees, punane – naine. Drawing / Joonis: Janika Viljat



Fig. 8. Children's skeletons (nos 9 and 10) in the bottom of the mass grave.

Jn 8. Laste skeletid (matused 9 ja 10) ühishaua põhjas. Photo / Foto: Martin Malve



Fig. 9. The excavated second layer of the mass grave. Jn 9. Ühishaua teine kiht väljapuhastatuna. Photo / Foto: Martin Malve

placed into the grave. Between these three burials 2–3 cm of soil was found. Lastly burials no 1 and 15 were placed on top of burials 2, 3 and 5. Two to three centimetres of soil were between burials no 1 and 2 and also between burials no 5 and 15. The mass grave may have been kept open for a while, to bury new dead. The soil between the buried could also result from placing new deceased into the grave or the grave diggers could have put soil filling between the dead.

Finds

Nine items were discovered from the grave and from the commingled material. The finds were most commonly linked to clothing. Four brooches were found: two penannular brooches with knobs, a penannular brooch and a round brooch. Two belt buckles were discovered. A part of a knife was unearthed from a young female's grave (no 7). An older woman (no 15) had a key with her. From the commingled material a copper alloy needle sheath was found and textile was discovered inside it. Such finds are characteristic to the Early Modern Period rural cemeteries (Valk 2001, 44–57).

Human remains

All 13 skeletons were osteologically analysed. The mass grave consisted of nine adults, of which four were males and five females. Additionally, four subadults were found. Most of the adults were aged between 35 and 45 years. Two of the children were under the age of ten (nos 9, 10). One subadult was 11–15 years old (no 2) and another one was 15–18 years of age (no 7). It was possible to determine the stature of six skeletons. The stature of the two male individuals were 171.5±3.27 cm and 168.7±3.27 cm respectively. Out of four females, the tallest one was 165.2±3.72 cm and the shortest 150.1±3.72 cm.

Teeth or dental sockets were preserved in 11 cases (nos 1, 2, 4–10, 14, 15). In total, information about 200 permanent and 22 deciduous teeth was available. Both adults and subadults had suffered from dental diseases. Nine skeletons had at least two to four different dental pathologies. In two other skeletons, at least five to six different dental diseases were documented. All the analysed skeletons had calculus. Caries had affected six adults (nos 1, 5, 6, 8, 14, 15) and two subadults (nos 7, 9). Enamel hypoplasia was seen on three adult's (nos 5, 6, 8) and three children's (nos 2, 9, 10) teeth. Periapical lesions were noted in four cases (nos 4, 8, 9, 15). Five adults (nos 1, 4, 8, 14, 15) had lost some teeth *ante mortem* and the same individuals had also suffered from periodontal disease. Two congenital dental abnormalities were registered. In one case (no 4), the right mandibular third molar had not erupted, but instead was visible inside of the mandibular ramus. Another example was burial no 8, whose left maxillary second incisor had erupted incorrectly.

Skeletal pathologies were found on nine individuals. The most common disease was periostitis, an inflammation of the periosteum, which had left its mark on nine skeletons (nos 3, 5–10, 13, 15). Six of the affected were adults and three were subadults. Periostitis can be caused by bacteria (staphylococcus or streptococcus), systemic disease, mild trauma or a reaction to a nonspecific stress (Connell *et al.* 2012, 109). This kind of high occurrence frequency is rare, and not usually seen on the osteological material of the other Estonian cemeteries from the same time period. For example, in Vastseliina borough cemetery the occurrence is much lower (Malve *et al.* 2018). The pathology was seen mostly on tibiae and fibulae (nos 3, 8, 9, 13), which is rather common (Miles *et al.* 2008, 126). The remaining five skeletons had periostitis on other parts of the skeleton. Burial no 5 had it on the right femur,

left tibia and left fibula and on the sacrum. Burial no 6 had periostitis on the scapulae, on the left innominate, sacrum and on the right first metacarpal bone. The disease was also seen on skeleton no 7, having left its mark on scapulae (Fig. 10), innominates, sacrum, femora, tibiae and fibulae. In the case of one of the children's burial (no 10), periostitis was found on the inner surface of the left side of the mandible. For burial no 15 the lesions ran along the shaft of the left VIII rib, which indicates that she had suffered from a chronic lung disease (Walker 2012, 40).

Sinusitis on the inner surface of the maxilla was registered in three cases (nos 5, 7, 8). The disease is revealed as outcrops of dense spicular bone (Fig. 11). All were females, two of them were adults and one subadult. The pathology can be caused by air pollution, congenital predisposition or systemic susceptibility (Lewis *et al.* 1995, 498).

Age-related diseases such as spondylosis and spondyloarthrosis were also found. Spondylosis, which is a deprecation of vertebral bodies, was discovered on seven adult skeletons (nos 1, 3, 4, 5, 6, 8, 15) between 27– 50 years of age. Spondyloarthrosis, the deterioration of vertebral joints, was registered in a single adult (no 15). The same individual also had osteoarthrosis, the degeneration of limb joints. Schmorl's nodes, caused by vertebral disc herniations, were found in six



Fig. 10. Periostitis on the anterior side of the right scapula (burial no 7).

Jn 10. Periostiit parema abaluu eesmisel pinnal (matus 7). Photo / Foto: Janika Viljat



Fig. 11. Medial view of the right maxilla, showing dense new bone formation (burial no 7).
Jn 11. Mediaalne vaade ülalõualuule, millel on näha uut tihedat luukudet (matus 7).
Photo / Foto: Janika Viljat

cases (1, 3, 6, 7, 8, 15). The pathology is a sign that the body had to bear heavy physical stress at a young age (Miles *et al.* 2008, 135). Males and females were equally affected by the disease. All of them were adults, with an exception of a single subadult (no 7).

Two adults had suffered from a bone fracture. Burial no 3 showed a healed bone fracture on the distal third of the right ulna and on the distal left radius. Because of the injury, the male had also suffered from a traumatic osteoarthrosis of the right elbow. A female (no 8) had a healed fracture on the body of the left IX rib. Burial no 6 had signs of porosity as a result of trauma or physical stress on the calcaneus' anterior surface and on the articular facet for the cuboid. The same kind of injury, known as an *os trigonum*, was seen in burial no 8, where the calcaneal tuberosity was unfused due to physical stress (Jones *et al.* 1999, 126).

Os acromiale occurs when the bony process on the scapula (*acromion*) is not fused with the scapula. Such pathology is usually linked to chronic stress (Miles *et al.* 2008, 147). This pathology was registered in two cases. For burial no 5, the acromia were unfused, while in the case of the burial no 15, the left acromion was unfused.

Small bony overgrowths, known as button osteomas were found on three skeletons. Burial no 6 had one osteoma on the right side of the frontal bone and two osteomas on the right parietal bone. One osteoma was found on the middle and occipital part of the sagittal suture of burial no 8. Burial no 15 had them on the right parietal bone and on the left side of the occipital bone. Button osteomas are a common finding in skeletal remains and are of no clinical significance (Walker 2012, 216).

Due to congenital peculiarity, the posterior arch atlas of burial no 5 had not been fused.

In general, the osteological material from Lossi St. 17 and the documented pathologies are characteristic to what is usually found in Medieval and Early Modern Period cemeteries (e.g. possible parish churchyard in Kodavere, see Valk *et al.* 2019, 123). Periostitis was the most common pathology, followed by physical stress related diseases, such as spondylosis and Schmorl's nodes.

DISCUSSION

During rescue excavations at the cemeteries, it is not rare to find burials that stray away from the characteristic burial traditions of the Medieval and Early Modern Period. It could be that the dead were buried in a prone position or with their head facing e.g. north instead of west. Skeletons in abnormal positions have been found in most of Estonian cemeteries that date back to the Medieval and Early Modern Period. However, some of these abnormalities probably happened unintentionally. The rectangular coffin type used at that time was pretty identical in all of its corners, so for instance the people placing it to the ground could have simply mistaken the head part with the lower part of the coffin.

It is also not uncommon to find mass graves or triple burials which are also considered to be deviant. Additionally, temporary burial places are sometimes discovered, mostly related to a famine, war or epidemics. Analysing such burial sites also gives us a better insight into the traditions and beliefs of the societies. For instance, it is known that criminals, stillborn babies who were not yet baptized, and people who had committed suicide were buried differently, usually outside the churchyard (Hermann 1977, 488; Malve *et al.* 2015). This article sheds light on abnormal burials, caused by epidemics or plague (the triple grave of Põlva and the mass grave of Tartu) and violence between humans (Rakvere).

The two children and one adult found from the St Mary's churchyard of Põlva probably died during the same event, possibly an epidemic or a famine (see e.g. Seppel 2008, 47–48 regarding famines). It is also possible that they were from the same family.

The individuals buried in the Lossi street mass grave probably died as a result of a pandemic or a famine as well. In 1987, archaeological excavation took place near the site, on the south side of the Cathedral (Valk 1995, 74). A mass grave with 43 individuals was found, only 50 metres away from the Lossi street mass grave. It needs to be noted that these mass graves cannot be directly connected with the medieval cemetery of the Cathedral. In both cases, the dead were buried in multiple layers during a longer time period, meaning that not all the individuals were placed into the grave at the same time. This burial style indicates that an epidemic spread there, lasting for quite some time. The finds discovered from both of the mass graves are mostly clothing accessories. The finds from the 1987 excavations are characteristic to Early Modern Period rural cemeteries. Lossi street mass grave finds are rather similar and thus date back to the same time period.

During this time, at the end of the 16th century, the Livonian War was devastating the land. It is highly possible that the individuals from the mass grave died during that time due to famine or plague (Russow 1993, 207, 271, 317), which the war had brought along.

There is no previous information about any human remains discovered from the area at Pikk street in Rakvere, where multiple deviant burials were found in 2019. Most of the dead were buried in a proper Christian manner, with their heads towards the west. No written documents or maps indicate the place being used as a gallows hill. A known gallows hill of Rakvere was situated in the present day Tallinna St. 38, between the streets of Rohuaia and Tallinna (Jung 1910, 170; Kirss 2004, 39). This makes the burials discovered even more strange as execution victims were usually not buried at the regular cemetery, but close to the gallows hill in Tallinn (Malve 2017). In two cases, such burials have been found in the church or in the churchyard, namely a decapitated male skeleton unearthed from the Tartu Cathedral (Malve 2011) and another execution victim, found in 2019 at the cemetery of the St Michael's Church in Rakvere (Malve *et al.*, this volume). Similar cases of individuals with neck injuries related to execution have also been documented in Latvia (Gerhards 2012) and Lithuania (Kozakaitė *et al.* 2018).

The Rakvere burials could also date back to the period of the 16th century Livonian war. The eastern part of Estonia suffered from several episodes of violence during the war, and it is possible that the burials found were either Estonian peasants who were executed in 1568 or Scottish mercenaries killed in 1574, during the quarrel with German mercenaries (Tarvel 1996, 257–258). However, none of the burials had any datable finds, so it is very difficult to pinpoint the exact time when these men died. In the Medieval and Early Modern Period, there could have been more than one gallows hill in the town. Their location could have changed in time as well. The discovered burial could have potentially been just a place used as a temporary execution site, where the victims were later buried. It is also possible that the choice of a place was totally random and only used to kill these particular individuals. Whichever the case, this discovery remains remarkable, for it is rare to find a burial site with multiple executed men.

CONCLUSION

During the fieldwork in 2019, three deviant sites were discovered, where the dead had not been buried according to the customs of the time. Mass graves where adult males and females were buried with children were unearthed from St Mary's churchyard of Põlva and from Lossi street in Tartu.

Such burial types indicate a high mortality rate during a short time period, possibly caused by a famine or a disease outbreak (e.g. plague). In the Põlva's case, it is unfortunately not possible to determine the death cause of the female and two children. However, the 13 individuals who were buried into the mass grave of Tartu probably died of plague which spread throughout the land during the Livonian war in the 16th century.

The discovered burial site at Rakvere Pikk street is quite different from those mentioned above. Outside the churchyard, just below the street, four probable execution victims were unearthed. The skeletons had unhealed sharp force traumas on their neck areas. Finding out the time of the burials is quite difficult, but it is most likely that they date back to the Early Modern Period.

The three deviant burial sites in question give us an insight, how and where the dead were buried during famines and epidemics. The remains of the executed men show how the probable criminals were treated after they were killed.

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RAKVEREST, PÕLVAST JA TARTUST AVASTATUD EBATÜÜPILISED MATUSED

Martin Malve ja Linda Vilumets

2019. aastal avastati Rakverest, Põlvast ja Tartust matuseid, mis erinevad üldlevinud matmisnormidest.

Rakvere Püha Mihkli kirikaiast u 200 m väljapool avastati inimluud otse Pika tn kõnnitee alt. Terviklikult oli säilinud vaid üks skelett, kolm luustikku olid fragmentaarsed ning ühe matuse luud koguti kokku juba varem segatud pinnasest. Esemeid leiti vaid matus 2 hauast, kus täiskasvanud mehe puusaluudel paiknes kolm rauast vöörõngast (jn 1). Maetute seas oli kolm meest ja ühe võimaliku mehe luud, viienda maetu sugu ei saanud luude fragmentaarsuse tõttu määrata. Kõik maetud olid täiskasvanud vanusevahemikus 25–44 aastat. Kolmel indiviidil olid hukkamisele viitavad surmaaegsed vigastused kaela piirkonnas.

Matusel 1 oli kaela selgmises osas koguni kolm löögijälge, mida märkisid lõikejäljed: II, III, VI, VII kaela- ja I rinnalülil (jn 2). Eemaldatud olid mõlema abaluu õlanukid (jn 3) ja löök oli tabanud ka vasaku õlavarre- ja rangluu selgmist osa (jn 4). Matusel 2 oli haav V kaelalülil. Matus 4 oli samuti saanud löögi selja tagant. Terariist oli diagonaalselt läbi lõiganud esimese kaelalüli ning mõlemad alalõualuu põntjätked. Viimane on harukordne juhtum, sest enamasti I kaelalülil surmamisele viitavaid tunnuseid ei esine.

Varem pole teateid luuleidudest, mis pärineksid Pika tänava lõigust, kust matused leiti, ka kirjalikud allikad ei viita hukkamispaigale selles piirkonnas. Teadaolev Rakvere võllamägi asus praegusel Tallinna tänav 38 krundil, Rohuaia ja Tallinna tänava vahel. Ühe võimalusena võivad leitud vägivallatunnustega mehed pärineda 16. sajandil maad laastanud Liivimaa sõja ajast. Samuti võis kesk- ja varauusaegses asulas olla rohkem kui üks hukkamispaik või võis see eri aegadel paikneda erinevates kohtades.

Arheoloogilistel uuringutel Põlva Püha Maarja kirikaias puhastati välja 18. sajandi keskpaigast pärinev kolmikmatus. Hauda oli asetatud täiskasvanu koos kahe lapsega (in 5). Surnud olid sängitatud ühte haualohku, lapsed ühes ja täiskasvanu teises kirstus. Laste kirstus, matus 1 parema õla juures oli münt, vene denga aastast 1739. Täiskasvanu skelett kuulus võimalikule üle 45 aastasele naisele (matus 2). Vanim laps oli 8-12-aastane (matus 1) ja noorim 5-9-aastane (matus 3). Patoloogiatest avastati täiskasvanul kaks paranenud luumurdu, skeletil esines ka jäsemeliigeste osteoartroosi ja selgroolülidel spondüloosi. Kõigil maetutel esines hambahaigusi. Lapsel (matus 3) tuvastati hammaste hüpoplaasiat (jn 6), kaariest ja üks hammas oli eluajal välja langenud. Tõenäoliselt hukkusid lapsed ja täiskasvanu ühe sündmuse käigus, milleks võis olla näiteks mõni haiguspuhang või näljahäda. Võimalik, et surnud olid ka ühest perekonnast.

Tartu, Lossi tn 17 Riigikohtu hoone renoveerimisel avastati hoone läänepoolse otsa juurest ühishaud. Surnud olid hauas tõenäoliselt neljas kihis (jn 7-9). Mitmete skelettide vahel oli pinnast, võimalik, et ühishauda on veidike aega lahti hoitud uute hukkunute jaoks. Maetute hulgas oli üheksa täiskasvanut, kellest neli olid mehed ja viis naised, ja neli indiviidi määrati alaealisteks. Täiskasvanute seas domineerisid 35-45 aastase vanusemääranguga indiviidid ja alaealiste puhul oli kaks alla 10 aasta vanust last (matused 9 ja 10), üks 11–15 aasta vanune (matus 2) ja üks 15–18 aastane nooruk (matus 7). Kõik maetud olid sängitatud ilma kirstudeta ühisesse hauda. Puusärkide puudumist kinnitab luustike ebatavaline asend hauas, sh paiknemine üksteise peal; sellest võib järeldada, et mõned surnud olid hauda visatud.

Maetud asusid hauas peaga nii lõuna- (matused 2, 3, 8, 15) kui ka põhjasuunas (matused 1, 4–7, 9, 10). Võib arvata, et nõnda asetatult mahtus hauda rohkem surnukehi. Seitse indiviidi (matused 2–6, 8, 15) olid asetatud hauda selili-siruli asendis, käed olid vaheliti üle kõhu või asetsesid nii kõverdatuna kui ka sirgena keha kõrval. Lapsematus nr 10 oli maetud kõhuli ja lapsematus nr 9 asetses külili. Luustike asendid hauas näitavad selgelt, et osa surnuid olid hauda kas visatud või asetatud väga hoolimatult (matused 1, 3, 5, 7, 9, 10, 15). Neli surnukeha oli aga ühishauda sängitatud korrapäraselt, neil olid käed asetatud rindkerele (matused 2, 4, 6, 8). Ühishaud pärineb tõenäoliselt 16. saj lõpust.

Skeletipatoloogiaid esines üheksal maetul. Kõige sagedamini esinev haigus oli periostiit e luuümbrise põletik, mis oli märgid jätnud üheksale luustikule (matused 3, 5–10, 13, 15). Selline arvukas luuümbrise põletiku esinemine on erakordne, mida tavaliselt kalmistute luuaineses ei näe. Enamasti tuvastatakse arheoloogilises materjalis periostiiti sääre- ja pindluudel, kuid Lossi tn luuaineses tuvastati seda ka keha teistes osades (jn 10). Sinuiiti ülalõualuu sisepinnal esines kolmel juhul (matused 5, 7, 8). Nimetatud haiguse võib esile kutsuda nt saastunud õhk või geneetiline soodumus (jn 11).

Ebatüüpilisi matuseid, kus surnu on hauas nt selili asendis või pea ei ole suunatud läände, on leitud enamikelt kesk- ja varauusaja Eesti kalmistutelt. Massihaudade või mitmikmatuste avastamine pole samuti midagi erakordset, sest see näitab, et samal ajal suri suur hulk inimesi. Samamoodi leitakse vahel ajutisi matmispaiku, mis on tavaliselt seotud nälja, haiguspuhangu või sõjategevusega. Selliste matuste analüüsimine annab meile paremat teavet, milliseid matmisviise ühiskonnas tavapäraste kõrval kasutati.