



## ARCHAEOLOGICAL RESCUE EXCAVATIONS IN HARGLA OLD PARISH CEMETERY

**MARTIN MALVE, RAIDO ROOG and ANTI LILLAK**

*Tartu Ülikool, Ajaloo ja arheoloogia instituut (University of Tartu,  
Institute of History and Archaeology), Lossi 3, 51003 Tartu, Estonia;  
martinmalve@gmail.com*

**JANA LIMBO-SIMOVART**

*Tallinna Ülikool, Ajaloo Instituut (University of Tallinn, Institute of History),  
Rüütli 6, 10130 Tallinn, Estonia*

### INTRODUCTION

During the deployment of drainage pipes in Hargla an early modern period cemetery was found about 70 m north-west from the crossroad of the Võru–Mõniste–Valga and the Laatre–Lüllemäe–Hargla roads in autumn 2011. After the discovery of the cemetery the earthworks were halted and rescue excavations were initiated. The excavation and the cleaning of the burials situated in the area of the pipeline trench were conducted by Arnold Unt (2011). The unearthed burials were documented and removed for further investigation by Martin Malve and Raido Roog. After the analysis the human remains will be reburied in Hargla.

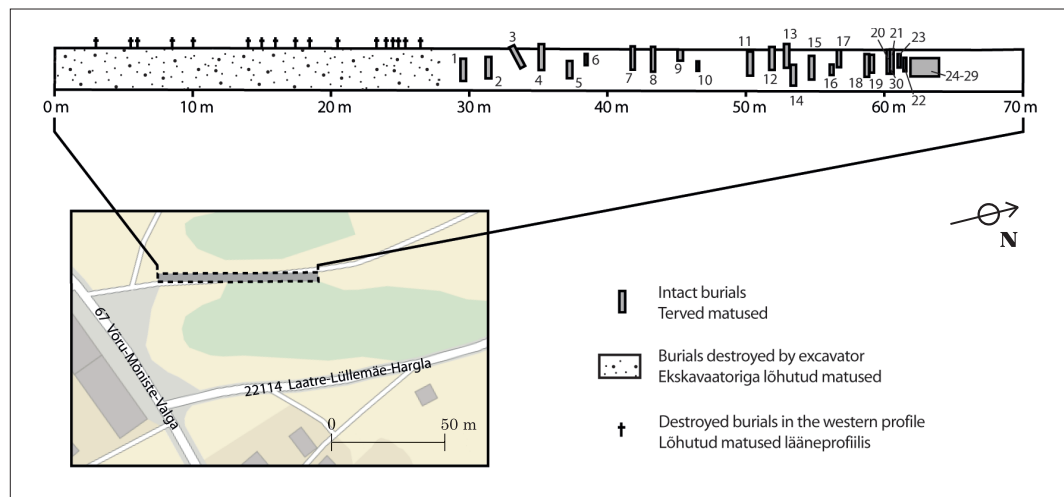


Fig. 1. Location of sewerage trench.

Jn 1. Kanalisatsioonitrassi asukoht.

Drawing / Joonis: Raido Roog



Fig. 2. Excavation plot from the north-east.

Jn 2. Kaevand kirdest.

Photo / Foto: Raido Roog

The pipeline trench dug in the cemetery was 70 m long, 3 m wide and 1.7 m deep (Figs 1, 2). The burials were destroyed in the southern part of the excavation plot (the southernmost *ca.* 28 m). Remains of at least 17 skeletons could be observed in the western profile of the trench, but the actual number of destroyed burials was definitely bigger. In the northern part of the trench 30 intact burials were found. No burials could be detected in the northern end of the excavation plot, suggesting that the cemetery did not reach farther north.

### **HISTORICAL BACKGROUND**

Hargla and its closer vicinity probably belonged to the Tartu bishopric in the medieval period (see for example Valgamaa 1932, 244–245). It was administratively connected to Gaujiena (Adsel) during the Polish reign (1561–1629). The first church in the Hargla region, called Swenciczky church, was mentioned in 1613 in the village of Laanemetsa. According to the church visitation in 1646 it was decided to organise church liturgies for local Estonian peasants in a barn house in Taheva until the building of a wooden church. In 1667 the Gaujiena assistant church named *Harjula* is mentioned

(Valgamaa 1932, 245–246). The local people may have been buried near the church (or the chapel) already at that time. Although the church or the chapel may have stood at the same place where the archaeological studies took place, its exact location is still somewhat unclear. The map of 1688 shows a chapel on the eastern side of the Hargla creek (EAA 308-2-167) but the precision of the map can be arguable.

King Charles XI of Sweden declared the independence of the congregation and parish of Hargla in 1694, so the church officially gained the status of a parish church. Soon after the beginning of the Great Northern War (1700–1721) the church was burnt down in 1702 by the Russian military troops. The new church was built only after the war and it was consecrated in 1729 (Valgamaa 1932, 246). From this time at the latest the church was situated west of the Hargla creek, at the site of the archaeologically investigated cemetery. Still, this building is mentioned to have been decayed already by 1750. The present stone church was built about 150–200 m west-southwest from the previous location in 1817–1819 (Valgamaa 1932, 263).

Burying in the old cemetery ended after the ordinances of the Russian empress Catherine II and the Senate in 1771–1772 that ordered to establish cemeteries at

a distance from the churches (Polnoye 1830, 409, 500, 691) to avoid the spread of infectious diseases. The new graveyard is situated about 0.5 km east of the church. The old cemetery was flattened during the term of office of Pastor Christian (1873–1892) (Kivirähk 1927, 85–86; Valgamaa 1932, 264). Still in the 1950s the area of the cemetery was clear from the trees (see for example ERM Fk 1523: 4510). Nowadays the site is covered with pine trees.

Previously the site has not been studied archaeologically. In 1920 the Estonian National Museum had been bestowed a heart-shaped brooch that was found from the old cemetery of Hargla (Liiv 1924, 32).<sup>1</sup> Human bones have been found from the periphery of the cemetery during land cultivation and other earthworks. The site is well known among the local people as a burial place (Unt 2011, 2–3).

## BURIALS

The graves were dug in sandy soil 0.5–1.2 m deep. Skeletons lay on their backs in stretched position. The heads of the deceased were directed westwards with deviations in both directions (the azimuth varied from 250° to 290°). The hands were placed mostly on the chest or stomach zone, but no exact hand position prevailed.

Altogether, 30 burials were examined, including 4 that were partly damaged by the excavator.<sup>2</sup> Additionally, at least 17 burials were destroyed during the digging of the trench (fragments of bones were preserved in the profile). All skeletons were heavily decomposed and the bones were fragmentary. On the contrary, in most cases, the remains of the coffins (Fig. 3) were relatively well preserved, probably all of them belonging to board coffins. In general, the coffin nails were absent; only two of them were found at burial no. 18. Wood samples were taken from the coffins where possible.<sup>3</sup> Only in one case there were no signs of the coffin (burial no. 30) and in case of burials nos 10, 22 and 23 the wood had decayed. In addition, among the organic material human hair had been preserved in burial no. 8.

The grave pits formed a quite even line, indicating an organised system of the burial places. Only burial no. 9 deviated from the line, being situated partly in the western profile. Burial no. 30 had been placed on burial no. 21, but the latter was not herewith damaged. The absence of over-burying shows that the burials belong to a relatively short period. In several occasions, where two or more burials were very close to each other, family burial places can be speculated. That was the case in burials nos 16–17, 18–19, 20–21, 22–23 and 24–29 (Figs 1, 4). In one case two burials were placed in the same grave pit – an older man (burial no. 27) with a 5–7 year old child (no. 26) on top of him.



Fig. 3. Burial no. 15 in board coffin.

Jn 3. Matus nr 15 laudkirstus.

Photo / Foto: Raido Roog

<sup>1</sup> The brooch is now stored in AI (AI 2513:86).

<sup>2</sup> Also the burials nos 14, 24, 25, 26, 27, 28 and 29 had been disturbed by the previous pipeline.

<sup>3</sup> The species of the wood are not yet identified. The samples are being examined by Alar Läänelaid and Kristina Sohar (Institute of Ecology and Earth Sciences, University of Tartu).





Fig. 4. Burials nos 24–29 (probable family burial place).

Jn 4. Matused nr 24–29 (oletatav perekonna matusekoht).

Photo / Foto: Raido Roog

## FINDS

The finds<sup>4</sup> consisted mostly of coins, brooches, belt buckles, knives and fragments of leather and textile (Table 1). Seven coins (Fig. 5) that were found as grave goods were identified as Russian *dengas* from the 18th century. They were placed mostly in the area of scapulae, spine and pelvis.

Six brooches (Fig. 6) were originally situated on the upper part of the chest. They were represented by two main types. Four small round brooches (diameter of 17–25 mm) were made of bronze, copper or silver. The arch of one of them was decorated with knolls (Fig. 6: 2), another had a number 5 carved on the back side of it (Fig. 6: 6b). Two heart-shaped brooches were found in burials nos. 1 and 15. The find material contains one fragment of a bronze finger-ring that was situated in the burial no. 5, in the finger of the right hand. Due to bad preservation it was not possible to document in which finger the ring was. The knives in three burials were placed next to the body, near the humerus, pelvis and femur.

Among the finds connected to the clothing six belt buckles were found in four burials, in the pelvic area. Two of them were in burial no. 13. Buckles were represented by three types: one round buckle, one bronze D-shaped buckle and four rectangular ones. Also fragments of textile and leather were found in the burials.

According to coins and brooches, the find material can be mainly dated to the 17th–18th century, being relatively typical for the rural cemeteries of southern Estonia in the Early Modern Times (see Valk 2001, 47–48).

<sup>4</sup> The finds TÜ 1970.



Fig. 5. Russian dengas from the burials: 1 – from 1752, 2 – from 1735, 3 – from 1750, 4 – from 1752(?).

Jn 5. Matuste juurest leitud Vene dengad: 1 – 1752. a, 2 – 1735. a, 3 – 1750. a, 4 – 1752(?) a.

(TÜ 1970: 5, 18, 28, 29.)

Photo / Foto: Raido Roog



Fig. 6. Brooches from the burials: 1, 2 – heart-shaped brooches (bronze), 3 – small round brooch (copper), 4, 5 – small round brooches (bronze), 6 – small round brooch (silver), views from the front and back side.

Jn 6. Matuste juurest leitud sõled: 1, 2 – pronksist südäsõled, 3 – vasest vitssõlg, 4, 5 – pronksist vitssõled, 6 – hõbedast vitssõlg eest ja tagant.

(TÜ 1970: 1, 19, 12, 11, 24, 27.)

Photo / Foto: Raido Roog

## OSTEOLOGICAL MATERIAL

More significant pathologies on the skeletons were determined by Martin Malve, the dental health was studied by Jana Limbo-Simovart and Martin Malve (Table 1). Subsequently some of the more interesting cases in bones and teeth are introduced.

### Methods

Due to the relatively poor preservation of the skeletons, the anthropological analysis was complicated. Teeth had been mostly fully preserved.

The gender of the burials was determined according to the morphological traits on the pelvis and cranium (Buikstra & Ubelaker 1994, 16–20); if these bones were missing,



Fig. 7. Heavy caries and ante mortem tooth losses on the lower jaw (burial no. 8).

Jn 7. Kaaries ja eluajal kaotatud hambad alalõual (matus nr 8).

Photo / Foto: Raido Roog



Fig. 8. Unerupted left canin on the lower jaw (burial no. 5).

Jn 8. Lõikumata vasak silmahammas (kaanin) alalõual (matus nr 5).

Photo / Foto: Raido Roog

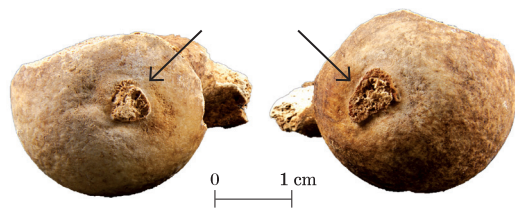


Fig. 9. Osteophytes (marked with arrows) caused by osteoarthritis on the femur heads' joints (burial no. 8).

Jn 9. Reieluu peade liigesepinnad osteoartroosist (noolled) tingitud luukasvistega (matus nr 8).

Photo / Foto: Raido Roog

the maximum length of the humerus and femur was used instead (Garmus & Jankauskas 1993, 6–8). The age was determined according to the changes in pubic symphyseal face of the adults (Todd 1920, 285–334; 1921, 1–70), closure of the cranium sutures (Buikstra & Ubelaker 1994, 16–20) and ageing changes in joints (Data collection codebook 2005, 31–33). The age of subadults was determined according to the formation and eruption of teeth (Ubelaker 1989, 63), the epiphyseal fusion (Recommendations 1980, 531) and the analysis of the length of the long bones (Allmäe 1998, 183).

Several pathologies were recorded on teeth: tooth stone, caries (Fig. 7), alveolar destruction, dental abscesses, *ante mortem* tooth losses (Fig. 7), dental hypoplasia, unerupted teeth (Fig. 8) and formation anomalies. In the case of tooth stone and the alveolar destruction (Brothwell 1981, 154–155, 159–160) the degree of their formation was determined.

### Skeletons

The analysis distinguished 14 males, 8 females and 8 subadults among the 30 intact burials (Table 1). Osteological study showed that in most cases the deceased were older adults, who had died at the age of 40+. Younger subadults were represented only by three individuals. The low number of subadults may be caused by the location of the excavation plot (on the place where children burials were not present) and poor preservation of the bones of children.

Because of the large number of the older individuals several pathologies connected to ageing dominated in the osteological material. Osteoarthritis of the limb joints (mostly on the knee and hip joints) (Fig. 9) was the most frequent disease that could be observed among seven



older individuals (see Table 1). Degenerative diseases were also detected on the vertebrae column; the most prevalent of them was spondyloarthrosis.

The occurrence of age related dental pathologies (*ante mortem* tooth loss, destruction of alveolar bone) was also high. Severe illnesses or famine during the childhood can cause malformation of tooth enamel (Waldron 2009, 244). Stronger metabolic insults leave more severe defects. Such developmental defects (dental enamel hypoplasia) were rare and not very strong. Slight enamel hypoplasia was registered only in the case of two children and four men (see Table 1).

Besides pathologies, several traumas were identified that could be connected to the lifestyle and activities of the people. Two men and a woman had Schmorl's nodes, also known as herniation of intravertebral disc that is caused for example by hard physical activity.

A skeleton of a male (burial no. 14) had two healed fractures in the midshaft and distal end of the left radius (Fig. 10). This kind of trauma can be interpreted as a parry fracture that is caused when the individual was using his arm to ward off a blow aimed at the head (Waldron 2009, 151) but it can also happen due to accident, stress, fatigue or predisposition through an underlying pathological condition (Smith 1996, 84). The same skeleton had the right transverse process of the fifth lumbar vertebra fused with the right side of the sacrum (also known as partial sacralisation). It is a relatively typical congenital anomaly of the spine.

In addition to the intact skeletons commingled human bones were studied. The minimum number of individuals was counted according to Adams and Konigsberg (2004, 138–139) from the bones that were collected from the removed soil. The remains of at least 6 individuals were distinguished among the commingled bones. This number is significantly smaller than the number of the destroyed burials detected in the profile of the trench, thus indicating that not all of the human remains were collected from the soil.

The osteological material of the Hargla graveyard is typical to the cemeteries of the same period, e.g. for example, cemeteries of the Valga St John's church and Lääniste (Malve 2009; Lillak & Malve 2011), where the majority of the deceased consisted of older adults and subadults. Intermediate age groups were underrepresented. Still it is complicated to make broader conclusions on the basis of such a small sample. The material should be examined in comparison to the burials in the vicinity, to gain a larger scale overview about the health and lifestyle of the local population in the 18th century.

## CONCLUSION

The old cemetery of Hargla was previously known in the written records as well as in local lore. Its formation can be dated back to the late 17th or the beginning of the 18th century and is connected to the parish church. In total, at least 47 burials were situated



Fig. 10. Two healed fractures in the midshaft and distal end of the left radius (anterior) compared to a normal right radius (below).

Jn 10. Kaks paranenud luumurdu vasaku kodarluu keskosas ja distaalses otsas (eestvaade) võrreldes terve parema kodarluuga (all).

Photo / Foto: Raido Roog

in the area of the pipeline trench, although only 30 of them had remained intact during the earthworks. Some of the burials seemed to form separate family burial places. The find material in the burials – coins, brooches, belt buckles etc. – is mostly dated to the 17th and the 18th century. The skeletons belonged mainly to the older grown-ups and often wore traces of several pathologies caused by diseases, traumas and physical activity. The number of subadults was smaller.

*Acknowledgements: This research was supported by the European Union through the European Regional Development Fund (Centre of Excellence of Cultural Theory (CECT)) and by the target funded research project of the Estonian Ministry of Education and Science (SF0130012s08). The authors would like to thank Rimantas Jankauskas (University of Vilnius), Kristel Külljastinen, Liisa Pöld, Alar Läänelaid, Kristina Sohar, and Andres Vindi (TÜ) for their help.*

Table 1. Hargla cemetery burials.

Tabel 1. Hargla kalmistu matused.

Compiled by / Koostanud: Martin Malve

Burial number/ Matuse number	Sex/ Sugu	Age/ Vanus	Pathologies/ Patoloogiad	Grave goods and remains of a costume / Panused ja rõivastuse jäänused
1	male	40+ years	osteoarthritis of the knee joints	heart-shaped brooch, belt buckle, knife
2	female	25–40 years	slight alveolar destruction, tooth abscesses, tooth caries, slight tooth stone, spondyloarthritis of the vertebrae joints	Russian <i>denga</i> (1752)
3	male	40–50 years	medium alveolar destruction, tooth abscess, tooth caries, slight tooth stone, ante mortem tooth loss	–
4	male	25–30 years	–	–
5	male	22–24 years	slight alveolar destruction, one milk teeth preserved, unerupted tooth	fragment of a ring
6	?	3 years ± 12 months	<i>cribra orbitalia</i>	–
7	male	40–45 years	medium alveolar destruction, tooth caries, <i>ante mortem</i> teeth loss, tooth hypoplasia, unerupted tooth, spondyloarthritis of the vertebrae joints	Russian <i>denga</i> (17??)
8	male	50+ years	considerable alveolar destruction, tooth abscesses, tooth caries, ante mortem tooth losses, osteoarthritis of the limb joints, spondyloarthritis of the vertebrae joints	Russian <i>denga</i> , belt buckle, textile fragment
9	female	40+ years	–	–
10	?	6 months ± 3 months	–	–
11	female	40+ years	considerable alveolar destruction, tooth caries, slight tooth stone, <i>ante mortem</i> tooth losses, spondyloarthritis of the vertebrae joints, Schmorl's nodes on 12th thoracic vertebra	flat round brooch
12	male	40+ years	<i>ante mortem</i> tooth loss, spondyloarthritis of the cervical vertebrae (C 1–3)	round brooch, belt buckle, knife, leather fragment



13	female	40+ years	slight alveolar destruction, <i>ante mortem</i> tooth losses, spondyloarthrosis of the vertebrae joints	2 belt buckles, knife
14	male	40+ years	considerable alveolar destruction, <i>ante mortem</i> tooth losses, traumatic osteoarthrosis of the left ulna distal joint, left radius with two healed fractures on the midshaft and on the distal end, 5th lumbar vertebrae sacralization, osteoarthrosis of the limb joints, Schmorl's nodes on 12th thoracic vertebra and on third lumbar vertebra	Russian <i>denga</i> (1735)
15	male	40+ years	tooth abscesses, tooth caries, <i>ante mortem</i> tooth losses, spondyloarthrosis of the vertebrae joints, Schmorl's nodes on thoracic vertebrae ( <i>Th</i> 9, 12),	heart-shaped brooch
16	?	18 months $\pm$ 6 months	–	–
17	?	8 years $\pm$ 24 years	tooth caries	–
18	female	50+ years	all tooth <i>ante mortem</i> lost, osteoarthrosis of the limb joints, spondyloarthrosis of the vertebrae joints, osteochondrosis of the cervical vertebrae ( <i>C</i> 6–7)	Russian <i>denga</i> (17??)
19	?	9 years $\pm$ 24 months	tooth caries, tooth hypoplasia	belt buckle
20	male	45+ years	considerable alveolar destruction, tooth caries, slight tooth stone, <i>ante mortem</i> tooth losses, tooth hypoplasia, osteoarthrosis of the limb joints, spondyloarthrosis of the vertebrae joints	flat round brooch, textile fragment
21	male	40–50 years	slight alveolar destruction, medium tooth caries, tooth stone, tooth hypoplasia, spondyloarthrosis of the vertebrae joints, Schmorl's nodes on thoracic ( <i>Th</i> 3, 6–8, 10–12) and on the first lumbar vertebra	leather fragment
22	?	2 years $\pm$ 8 months	–	–
23	?	2 years $\pm$ 8 months	–	–
24	female	25–35 years	slight alveolar destruction, tooth caries	silver flat round brooch
25	female	40–50 years	medium alveolar destruction, <i>ante mortem</i> tooth losses, spondyloarthrosis of the vertebrae joints	–
26	male	40+ years	tooth caries, tooth abscesses, <i>ante mortem</i> tooth losses, osteoarthrosis of the limb joints, spondyloarthrosis of the vertebrae joints, Schmorl's nodes on thoracic vertebrae ( <i>Th</i> 5, 8–9)	–
27	?	6 years $\pm$ 24 months	tooth caries, tooth hypoplasia	Russian <i>denga</i> (1750)
28	male	45+ years	<i>ante mortem</i> tooth losses	Russian <i>denga</i> (1752?)
29	male	35–45 years	medium alveolar destruction, tooth abscess, tooth caries, <i>ante mortem</i> tooth loss, tooth hypoplasia	–
30	female	40+ years	–	–

## REFERENCES

- Adams, B. J. & Konigsberg, L. W. 2004.** Estimation of the most likely number of individuals from commingled human skeletal remains. – *American Journal of Physical Anthropology*, 125: 2, 138–151.
- Allmäe, R. 1998.** Tääksi 14.–18. sajandi populatsiooni demograafiline analüüs ja kehapikkuse rekonstrueerimine. – *Loodus, inimene ja tehnoloogia. Interdistsiplinaarseid uurimusi arheoloogias*. Ed. by J. Peets. *Muinasaja teadus*, 5. Tallinn, 163–187.
- Brothwell, D. R. 1981.** Digging up Bones. New York.
- Buikstra, J. E. & Ubelaker, D. H. 1994.** Standards for Data Collection from Human Skeletal Remains. *Arkansas Archeological Survey Research Series no. 44*. Arkansas.
- Data collection codebook 2005.** The Global History of Health Project. [http://www.uv.es/paleolab/Codebook-08-25-051\[1\].pdf](http://www.uv.es/paleolab/Codebook-08-25-051[1].pdf). (14.03.2012.)
- EAA 308-2-167.** Adzels Gebiet medh underliggande Häff och Bänder. 1688. (*Map in EAA*.)
- ERM Fk 1523: 4510.** Maastik Hargla kirikuga. Photo by Gustav Vilbaste, 1957. (*Photo in ERM*.)
- Garmus, A. & Jankauskas, R. 1993.** Methods of person's identification from the skeleton in Lithuania. – *Medicina Legalis Baltica*, 3–4, Vilnius, 5–23.
- Kivirähk, A. 1927.** Hargla kihelkonnast 1927. a. suvel kogutud ajalooline traditsioon. (*Manuscript in TÕAK*.)
- Liiv, O. 1924.** Hargla kihelkond. (*Manuscript in TÕAK*.)
- Lillak, A. & Malve, M. 2011.** Archaeological investigations on the cemetery of the Lääniste hill fort. – *AVE*, 2010, 209–218.
- Malve, M. 2009.** Osteoloogiline analüüs. Aruanne arheoloogilistest uuringutest Valga Jaani kiriku ümbruses seoses Valga keskvaljaku rekonstrueerimisega 2008. aastal. Tartu. (*Manuscript in TÕAK*.)
- Polnoye 1830** = Полное собрание законовъ Россійской имперіи съ 1649 года. Томъ XIX. 1770–1774. Санктпетербург, 1830.
- Recommendations 1980.** Workshop of European Anthropologists, 'Recommendations for Age and Sex Diagnoses of Skeletons'. – *Journal of Human Evolution*, 9, 517–549.
- Smith, M. O. 1996.** 'Parry' fractures and female-directed interpersonal violence: implications from the Late Period of West Tennessee. – *International Journal of Osteoarchaeology*, 6: 1, 84–91.
- Todd, T. W. 1920.** Age changes in the pubic bone. I: the male white pubis. – *American Journal of Physical Anthropology*, 3: 3, 285–334.
- Todd, T. W. 1921.** Age changes in the pubic bone. III: The pubis of the white female. IV: The pubis of the female white-negro hybrid. – *American Journal of Physical Anthropology*, 4: 1, 1–70.
- Ubelaker, D. H. 1989.** Human skeletal remains. Excavation, Analysis, Interpretation. *Manuals of Archaeology*, 2. Washington.
- Unt, A. 2011.** Hargla külakalmistu XVIII saj. Tartu. (*Manuscript in TÕAK*.)
- Valgamaa 1932** = Valgamaa. Maadeteaduslik, tulunduslik ja ajalooline kirjeldus. – Eesti. Maadeteaduslik, tulunduslik ja ajalooline kirjeldus, 5. Tartu.
- Valk, H. 2001.** Rural cemeteries of Southern Estonia 1225–1800 AD. 2nd edition. *CCC Papers*, 3. Visby-Tartu.
- Waldron, T. 2009.** Palaeopathology. Cambridge Manuals in Archaeology. Cambridge.

## PÄÄSTEKAEVAMISED HARGLA VANAL KIHELKONNAKALMISTUL

*Martin Malve, Raido Roog, Anti Lillak ja Jana Limbo-Simovart*

2011. a sügisel avastati kanalisatsioonitorustiku paigaldamisel Harglas Võru–Mõniste–Valga ja Laatre–Lüllemäe–Hargla maantee ristumiskohast u 70 m loodes varauusaegne kalmistu. Kaevatud trass oli 70 m pikk, 3 m lai ning 1,7 m sügav (jn 1, 2). Uuritava ala lõunaosas oli ekskavaator matuseid lõhknud. Trassi läänepiirilis võis täheldada vähemalt 17 luustiku jäänuseid, kuid lõhutud matuseid oli kindlasti rohkem. Trassi põhjaosas leiti 30 tervet matust.

Keskajal tõenäoliselt Tartu piiskopkonda kuulunud ning Poola võimu ajal (1561–1629) halduslikult Gaujienaga liidetud Hargla piirkonna esimest, Swenciczky-nimelist kirikut on mainitud 1613. aastal Laanemetsas. 1646. a Rootsi kirikuvisiitatsiooni tulemusel otsustati hakata Hargla piirkonna eestlastele pidama Tahevas jumalateenistusi ühes rehehoones, kuni puukiriku valmimiseni. 1667. aastast on mainitud Gaujiena alla kuuluvat *Harjula*-nimelist abikirikut. Lähikonna rahvas võis juba sellal hakata pühakoja ümber surnuid matma, ent selle täpsem asukoht jääb siiski mõneti ebaselgeks. 1688. aastasse kuuluval piirkonna kaardil on kabel märgitud hoopis Hargla oja idakaldale, kuid kaart ei pruugi olla täpne.

Hargla kogudus ja kihelkond kuulutati iseseisvaks 1694. aastal ning kirikust sai kihelkonnakirik. Juba 1702. aastal põletasid Vene väed kirikuhoone maha. Uus hoone ehitati üles pärast Põhjasõda ja pühitseti sisse 1729. aastal. Hiljemalt alates sellest ajast võis kirik paikneda just nimelt Hargla ojast lääne pool, arheoloogiliselt uuritud vana kalmistu alal. Praegune kivist kirik ehitati vanast asukohast umbes 150–200 m lääneedelasse aastatel 1817–1819.

Vanale kalmistule lõpetati matmine nähtavasti keisrinna Katariina II ja Senati 1771–1772 välja antud määrustega, mis käskisid teha surnuaiad nakkushaiguste leviku vältimiseks kirikutest eemale. Hargla uus surnuaed rajati kirikust umbes 0,5 km ida poole.

Varem pole kalmistul arheoloogilisi uuringuid tehtud. Juhuleiuna on vanalt surnuaialt saadud südamekujuline sõlg. Kalmistu servaalast on maaharimise ja muude tegevuste käigus eri aegadel välja tulnud inimluid. Koht on kohalikele inimestele matusepaigana hästi teada.

Hargla kalmistu hauad olid kaevatud u 0,5–1,2 m sügavusele liivapinda. Luustikud olid selili siruli asendis, pea läänes. Käed olid asetatud enamasti rinnale või kõhule. Kokku uuriti 30 matust, millest viis olid osaliselt ekskavaatoriga lõhutud. Lisaks neile oli trassi kaevamisega hävitatud vähemalt 17 matust, kuigi osaliselt olid nende jäänused säilinud profiilis. Kõik luustikud olid tugevasti kõdunenud, ent kirstud (tõenäoliselt olid kõik laudkirstud) olid enamasti võrdlemisi hästi säilinud (jn 3). Kirstudest võeti puiduproovid, kuid puidu liik pole veel määratud. Orgaanilisest materjalist oli matuses nr 8 säilinud ka juukseid.

Pinnase eemaldamise järel joonistus välja suhteliselt ühtne haualohkude rida, mis viitab korrapärasele hauaplatside süsteemile. Vaid matus nr 9 jäi sellest osaliselt välja, jäädes suuremas osas läänepiirili. Matusele nr 21 oli küll peale maetud luustik nr 30, kuid selle käigus ei olnud siiski teda lõhutud. Kuna uuritud alal ei esinenud mitte ühtegi ülematmist, on tõenäoliselt tegemist ühest perioodist matustega. Mitmel puhul võis oletada perekonna hauaplatse, kus kaks või rohkem matust asusid tihedalt üksteise kõrval (jn 1, 4). Ühel juhul oli ühte hauda pandud ka kaks surnut korraga – vanem mees (matus nr 27) oli maetud koos 5–7 aastase lapsega (matus nr 26), kes oli tema peale asetatud.

Leiumaterjal koosnes peamiselt müntidest, sõlgedest, vööpannaldest, nugadest ning naha- ja tekstiilikatketest (tabel 1). Seitsme matuse juurest leiti panustena kaasa pandud Vene dengad 18. sajandist (jn 5). Mündid leiti surnute alt kirstu põhjast, valdavalt abaluude, selgroo ja vaagna piirkonnast. Sõled esinesid luustike rinna ülasaosas, kuuludes kahte peamisse tüüpi: ümarsõlg ja südamekujuline sõlg (jn 6). Ainus sõrmuse katke leiti matuse nr 5 luustiku parema käe sõrmest. Kolm nuga paiknesid surnute külgedel, õlavarre-, puusa- ja reieluude juures tera suunaga alla.

Rõivastusega seotud leidudest saadi neljast matusest kokku kuus vööpannalt, sh matusest nr 13 kaks tükki. Pandlaid oli kolme tüüpi: üks ümmargune, üks D-kujuline ja neli kandilist. Kõik pandlad paiknesid vaagna piirkonnas. Mõnedes matustes oli säilinud ka tekstiili- ja nahakatkeid.

Müntide ja sõlgede põhjal võib matuste leiumaterjali dateerida peamiselt 17.–18. sajandisse. Tegemist on Lõuna-Eesti varauusaegsetele külakalmetele üsna iseloomulike esemetega.

Kuna luustikud olid küllaltki halvasti säilinud, oli nende antropoloogiline analüüs raskendatud (tabel 1). Kõige paremini olid säilinud hambad. Hammastel dokumenteeriti mitmeid patoloogiaid: hambakivi, kaaries (jn 7), hambasompude taandumine, hammaste abstsessid (juurealused mädakolded), enne



surma kaotatud hambad (jn 7), lineaarsed stressijooned, lõikumata hambad (jn 8) ja kasvuanomaaliad. Hambakivi ja -sompude taandumise puhul määrati nende arengu aste.

Kaevamistel leitud 30 matusest eristati analüüsi käigus 14 meest, 8 naist ja 8 last. Osteoloogiline uuring näitas, et enamjaolt oli tegemist vanemate täiskasvanutega (vanuses 40+ aastat). Kuna tegemist oli vanemate inimestega, siis osteoloogilises aineses domineerisid mitmed skeleti vananemisega kaasnevad haigused. Enamlevinud patoloogiaks oli jäsemeliigeste osteoartritis (jn 9), mida esines viiel üle 40 aastasel indiviidil (vt tabel 1). Selgrool täheldatud skeleti degeneratiivsetest haigustest oli kõige sagedasem selgroolülide liigespindade kulumine. Vananemisega seotud patoloogiaid võis täheldada ka hammastel. Lisaks patoloogiatele tuvastati mitmeid traumasid, mida võib seostada kohalike elanike eluviiside ja tegevustega. Kahel mehel ja ühel naisel leiti selgroo rinnalülidel füüsilisest koormusest tingitud haigus – Schmorli sõlmed ehk lülivaheketaste song.

Matusel nr 14 oli mehe luustikul kaks paranenud luumurdu vasaku kodarluu diafüüsi keskosas ja kaugemas otsas (jn 10). Sellist traumat on tõlgendatud nn pareerimismurruna, mis tekib, kui inimene kaitseb ennast pähe suunatud löögi eest. Sellist traumat võib põhjustada ka õnnetus, stress, kurnatus või haiguse tekitatud eelsoodumus. Samal luustikul oli V nimmelüli parem ristjätke kokku kasvanud ristluuga ehk sakraliseerunud.

Trassist väljatõstetud pinnasest korjatud segatud inimluude seast õnnestus tuvastada reie- ja koljuluude järgi vähemalt 6 indiviidi. See on märgatavalt vähem kui profiilis täheldatud lõhutud matuste arv, näidates, et eemaldatud pinnasest ei olnud välja korjatud kõiki sinna sattunud inimluud.

Hargla kalmistu osteoloogiline aines on iseloomulik selleaegsetele kalmistutele (nt Valga Jaani kiriku ja Lääniste kalmistud), kuhu enamjaolt oli maetud vanemaid inimesi ning teisi vanusegruppe esineb vähem. Samas on raske teha üldistavaid järeldusi nii väikese valimiku põhjal. Kindlasti tuleks materjali võrrelda sama piirkonna ja naaberalade kalmistute matustega, saamaks täpsemat teavet 18. sajandi elanike tervise ja eluviisidest.