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Urvaste Ala-Kõrtsi cemetery – a burial site from the 13th century

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INTRODUCTION

In the summer of 2024, the University of Tartu organised archaeological trial excavations on the cemetery of Ala-Kõrtsi near the Urvaste parish centre in the historical Võrumaa province. The study aimed to get information about the cultural situation and burial practices in the core areas of the prehistoric Ugandi province in the 13th century.

The cemetery of Ala-Kõrtsi has repeatedly been looted by illegal metal detectorists. In 2017, one burial was investigated by archaeologists and the whole cemetery area was systematically surveyed by metal detectors to prevent further looting (Valk *et al.* 2018). The finds gained by detecting indicate the use of the site in two phases: 1) during the Roman Iron Age and the Migration period, and 2) mainly in the 13th century. Artefacts typical for the village cemeteries of southern Estonia since the mid-13th century were missing in the find assemblage, indicating very short-time use of the burial site and suggesting that the cemetery was abandoned in the second half of that century – most likely due to the founding of the parish church and a churchyard cemetery around it in the distance of ca. 450 metres.

The area for the investigations of 2024 (Fig. 1) was chosen based on the results of former metal detector studies in the region of the highest density of 13th century stray finds. All in all, four ca. 30 cm wide trenches with a total length of 50 m were made on the

Fig. 1. *Archaeological investigations at Urvaste Ala-Kõrtsi cemetery.*
Jn 1. *Arheoloogilised uuringud Urvaste Ala-Kõrtsi kalmistul.*
Photo / Foto: Silver Jäger

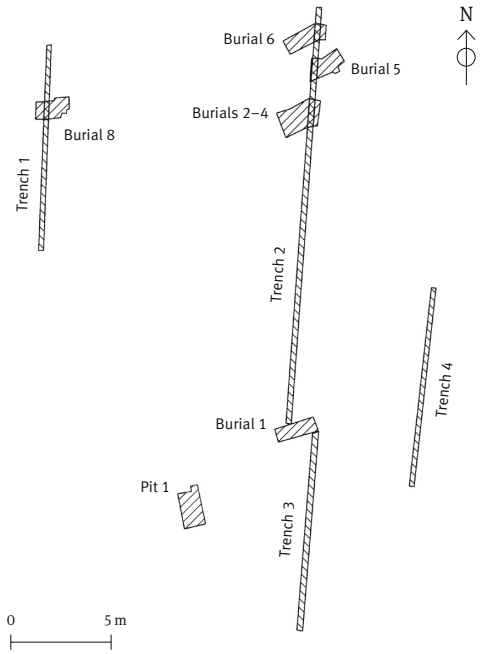

Fig. 2. *Trenches at Ala-Kõrtsi cemetery.*
Jn 2. *Kaevandid Ala-Kõrtsi kalmistul.*
Drawing / Joonis: Marie Anna Blehner

hill (Fig. 2) to discover grave pits against the background of intact mineral soil.[1] All soil was sieved on 5 mm eye diameter meshes. An extra pit was made in the area where a 13th century axe (*ibid.*, fig. 13: 6) was found in 2017, but no burial was discovered there. The ground was disturbed to a depth of ca. 60 cm, whereby some brick fragments indicated a very late disturbance.

Furthermore, additional detecting was performed on the hill by Jaanus Naaber and Indrek Johanson in 2024, but only very few finds were gained from the peripheries of the formerly investigated areas, covered with high grass in the autumn of 2017.

BURIALS AND FINDS

From the trenches, seven burials and a cenotaph – a symbolic grave with no bones – were discovered, and six of them were excavated. Most of the skeletons lay in the depth of only 25–44 cm, being all at least partly disturbed by ploughing. One grave remained unopened, because of the greater depth (ca. 70 cm) and limited time resources. Remains of organics found at the skeletons were removed as blocks (see text below and Table 1). Burials nos 2–6 were located close to each other, forming a compact group (Figs. 2, 3), considering the generally sparse location of the graves, as indicated by the trenches.

Fig. 3. *Investigation area with burials no. 2–6.*
Jn 3. *Uurimisala matustega 2–6.*
Photos / Fotos: Marie Anna Blehner, photogrammetry / fotogramm-meetria: Margarita Gadalšina

[1] The finds: TÜ 3257: 1–62.

Burial no. 1 was discovered in a place where two bracelets set into each other were discovered by the metal detector in 2017, together with human bones. The skeleton of a 35–45-year-old man was oriented with the head towards the west (260°). Its right hand lay on the pelvis, the left was straight along the body. The feet of the skeleton had been greatly disturbed by ploughing. The removed bracelets had lain on the lowest left ribs, as indicated by the green colour of the bones, but no more finds were discovered from the grave.

Burials nos 2–4 – the skeletons of a man (no. 2), a woman (no. 3) and a baby (no. 4) – were located in the same grave pit (Fig. 4). The adults of different sex lay in a supine position, closely beside each other, and were oriented, as characteristic for medieval burial rites of the historical Võrumaa area, with the heads in opposite directions (Valk 2001, 70–72; Valk *et al.* 2024, 150). The man was buried with his head towards the south-west (250°). The skeleton of the north-east oriented woman was slightly curved – the orientation of her backbone was 60°, that of the lower part of the body was 70°.

Burial no. 2. The skeleton of the adult man, aged over 60, was greatly damaged by ploughing. His hands lay parallel to the body. 70 disturbed copper alloy spiral tubes and five cowry shells were found above and between the pelvic bones of the skeleton, but they probably originate from burial no. 3, having been shifted there by ploughing.

Burial no. 3. The burial of a woman, around the age of 40–50 years, was also greatly disturbed by ploughing. Under the skull and beside the left humerus, some coffin remains were found. A penannular brooch with a missing end knob (Fig. 5: 1) was located on the neck. The woman was buried with a necklace of cowry shells and seed beads. The right hand was bent to the right shoulder, and there was a ring with a broad middle coil (Fig. 5: 2) on the third finger. The bones of the left arm were disturbed by ploughing, but the finger bones lay mainly in the region of the right shoulder. An iron spiral ring (Fig. 5: 3) was on the fifth finger. The green colour of the disturbed left ulna and radius (Fig. 4) probably indicates a bracelet or bracelets which has/have been removed by former looting. Under the left side of the body, a knife (Fig. 5: 4) was placed perpendicularly to the backbone.

Fig. 4. *Burials no. 2, 3 and 4.*
Jn 4. *Matused 2, 3 ja 4.*
Photo / Foto: Martin Malve

Remains of organics and assemblages of spiral tubes, which were found near the bones in three locations, were taken up as three blocks (nos V–VII, see below and Table 1). The biggest of them (no. VII), which later turned out to contain the remains of a

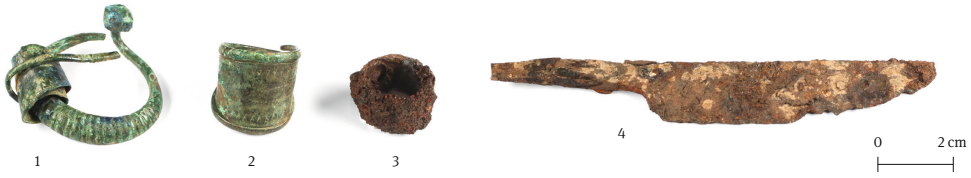

Fig. 5. *Finds from burial no. 3. 1 – a penannular brooch, 2 – a ring with a broad middle coil, 3 – a spiral ring, 4 – a knife.*
Jn 5. *Matuse nr 3 leiud. 1 – hoburaudsõlg, 2 – laia keskkeermega sõrmus, 3 – spiraalsõrmus, 4 – nuga.*
(TÜ 3257: 36, 34, 35, 37.)
Photo / Foto: Marie Anna Blehner

Table 1. *Blocks taken during the excavations at Urvaste Ala-Kõrtsi cemetery in 2024*
Tabel 1. *Urvaste Ala-Kõrtsi kalmistu 2024. aasta monoliidid*
Compiled by / Koostanud: Riina Rammo, Kristel Kajak, Marie Anna Blehner

Block no. / Monoliidi nr	Burial no. / Matus nr	Cat. no. / Leiunr	Location of the blocks / Monoliidi asukoht	Description of finds / Leidude kirjeldus	Measurements / Mõõtmed (cm)
I	8	56	The middle part of the cenotaph grave pit	Bracelets (2), finger-ring, wood remains (coffin), charcoal, bone fragments	28 × 58 × 6–10
II	5	57	The left side of the burial containing the phalanges of the left hand	Spiral tubes (ca. 30), iron finger-ring, phalanges (2), tiny thread and wood remains (coffin)	15 × 10 × 4
III	5	58	The lateral part of the left tibia	Spiral tubes (4), tiny bone and thread remains	10 × 11 × 3.5
IV	5	59	Between the tibias	Rows of spiral tubes, spiral tubes, tin alloy remains, degraded textile remains, wood remains (coffin), bones	40 × 48 × 16
V	3	60	The lateral part of the left femur	Spiral tubes (ca. 60), organic matter, tin alloy remains (30+), charcoal	15 × 10 × 4–5
VI	3	61	The outer part and under the right ilium	Spiral tubes (74), thread pieces, tin alloy remains (ca. 12), charcoal	14 × 12
VII	3	62	The left part of the chest area	Fragments of spiral tube patterns, spiral tubes (63), thread, tin alloy (50+), wood and bone remains, charcoal, organic matter	27 × 24 × 3–7

'back apron' (see below), was taken from under and beside the middle back on the left side. Small spiral tubes, disturbed by ploughing and originating from the same clothing item, could be seen on top of the block near the left pelvic bone, beside the lowest left ribs.

Burial no. 4. The disturbed bones of a baby who died at the age of 1.5–4.5 months, poorly preserved and partly disturbed by ploughing, lay on the pelvis of the woman. The direction of the head (210°) suggests the baby was a boy, but ancient DNA analysis (University of Tartu aDNA lab) indicates a female person.

Burial no. 5. From the skeleton of an adult woman, only the *in situ* shinbones were preserved at the depth of 27–30 cm. The rest of the burial had been destroyed by ploughing and receded down the slope, except for some finger bones of the left hand, which were found from the region of the left shoulder. The woman was buried with her head towards the north-east (50°). Under the upper third of the shinbones and on top of the decayed coffin bottom, the remains of a textile item, decorated with copper alloy spiral tubes located in four parallel rows were found (Fig. 6). The find was removed as a block (see below: block no. IV) and fully opened in laboratory conditions. Block (no. II) with the remains of the left hand fingers contained an iron spiral ring with imprints of textile (Fig. 7: 1), ca. 30 spiral tubes, and tiny thread remains. In the area of the disturbed grave pit two copper alloy rings – a spiral ring and a fragment of a ring with a broadening flat middle coil (Fig. 7: 2, 3) – were found, but their connection with the burial remains unclear.

Fig. 6. *Ornamentation of copper alloy spiral tubes at the shinbones of burial no. 5.*
Jn 6. *Spiraaltorukestest kaunistused matuse 5 sääreluude juures.*
(TÜ 3257: 59.)
Photo / Foto: Martin Malve

Burial no. 6. The skeleton of a man of 35–45 years lay in a stretched supine position, with the head oriented towards the south-west (235°). Since the bottom of the grave was at the depth of 43–44 cm, the burial was almost not disturbed by ploughing. The skeleton was slightly bent in the belt region, and no coffin remains were found near the bones. The man was buried with a penannular brooch (Fig. 8: 1) on his chest. On the inner side of the right leg, there was a tiny bronze buckle (Fig. 8: 2) and on the lower end of the backbone, there was an assemblage of corroded iron – the remains of an iron buckle and an oval fire steel. Beside the left knee, there was a knife with its tip towards the head of the grave (Fig. 8: 3).

Fig. 7. *Rings from the grave pit of burial no. 5. 1 – from the left hand bones, 2 and 3 – stray finds from the grave area.*
Jn 7. *Sõrmused matuse 5 haua piirkonnast. 1 – vasaku käe luude juurest, 2 ja 3 – künniga segatud leiud haua piirest. (TÜ 3257: 57a, 26a, 26b.)*
Photo / Foto: Marie Anna Blehner

Fig. 8. *Finds from burial no. 6. 1 – a penannular brooch, 2 – a buckle, 3 – a knife.*
Jn 8. *Matus 6 leiud. 1 – hoburaudsõlg, 2 – pannal, 3 – nuga. (TÜ 3257: 40, 41, 42.)*
Photo / Foto: Marie Anna Blehner

Burial no. 7, the head oriented towards WSW (255°), was discovered in one of the trenches in a 70 cm deep grave pit which was not opened. Beside the thigh bone, there was a single cowry shell.

Burial no. 8 – a cenotaph. In addition to actual graves, a cenotaph burial was also discovered. When digging Trench no. 1, a find assemblage consisting of two bracelets without any bones and a spiral ring with a broadening shield (Figs 9, 10: 1–3) was found within an oblong irregular patch of dark soil – the remains of decayed organics (measures 45 × up to 25/29 cm). The objects were taken up as

Fig. 9. *Bracelets and a ring from the cenotaph (burial no. 8)* in situ.
Jn 9. *Käevõrud ja sõrmus kenotaafmatuses (nr 8)* in situ.
Photo / Foto: Heiki Valk

a block (no. I). Since disturbed ground continued in the profiles, the trench was extended in both directions, and finally, a 52–55 cm deep north-east–south-west directional (35–215°) pit with the measurements of up to 160 × 50 cm came to light. In the distance of 40 cm north-east of the bracelets, a knife (Fig. 10: 4), lying parallel to the axis of the pit, was discovered in the same depth. In the distance of 40 cm from the knife and 30 cm from the north-eastern end of the pit, an oval fire steel with two pieces of local flint (Fig. 10: 5, 7) and a small iron buckle (Fig. 10: 6) were found. Dark soil based on decomposed organics on an area of up to 25 × 35 cm could also be observed under and around this find group.

Although the measures of the grave pit correspond to the grave of a smaller adult or a juvenile, and its orientation to that of other discovered graves, absolutely no bone or tooth fragments were found from it, despite the rather good preservation of bones in the cemetery. Finds in the position typical for inhumation burials indicate a symbolic burial – a cenotaph. The bracelets and ring might designate the lower part of the chest, the knife might have been placed beside the left thigh and the belt buckle and fire steel at the legs. The presumed location of the 'head' in the south-western end of the pit might refer to the cenotaph of a male person. In support of this interpretation, it must be noted that also in male grave no. 6, a tiny buckle was found on the shinbones and that male burial no. 1 was buried together with bracelets. The cenotaph might reflect a death case when the body was not available for burial (e.g. drowning, being killed or dying far from home, e.g. on a raid).

In addition to finds from the burials, a few artefacts were gained from layers disturbed by ploughing, mostly by using metal detectors. Among these finds, three tiny fragments of silver jewellery items – of a sheet pendant (Fig. 11: 1) and two bracelets (Fig. 11: 2, 3) must be specially noted. Other finds include two bracelet fragments (Fig. 11: 4, 5), a tiny bell (Fig. 11: 6), a belt clasp with a tiny ring on it (Fig. 11: 7), a chain fragment (Fig. 11: 8), a seed bead (: 22), two small buckles (Fig. 11: 9, 10), a pendant schilling of Riga Free Town (1577?), two broken knives (: 5, 46), and some dispersed copper alloy spiral tubes. Sieving the soil revealed some small fragments of hand-made pottery, representing, probably, some earlier use of the cemetery.

Fig. 10. *Finds from the cenotaph (burial no. 8). 1, 2 – bracelets, 3 – a ring, 4 – a knife, 5 – a fire steel with a flint piece, 6 – a buckle, 7 – a flint piece.*

Jn 10. *Leiud kenotaafmatusest nr 8. 1, 2 – käevõrud, 3 – sõrmus, 4 – nuga, 5 – tuleraud ja tulekivitükk, 6 – pannal, 7 – tulekivitükk.*

(TÜ 3257: 56b, 56c, 56a, 14, 13, 12, 11.)

Photo / Foto: Marie Anna Blehner

Fig. 11. *Metal detector finds from Urvaste Ala-Kõrtsi cemetery. 1 – a silver sheet pendant fragment, 2–3 – silver bracelet fragments, 4–5 – bracelet fragments, 6 – a bell, 7 – a belt clasp, 8 – a chain fragment, 9–10 – buckles.*
Jn 11. *Detektorileide Urvaste Ala-Kõrtsi kalmelt. 1 – hõbedast rinnalehe katke, 2–3 – hõbekäevõrude katked, 4–5 – käevõrukatked, 6 – kuljus, 7 – vöömanus, 8 – ketikatke, 9–10 – pandlad.*
(TÜ 3257: 45, 47, 53, 25, 54, 55, 52, 23, 19, 49.)
Photo / Foto: Marie Anna Blehner

BLOCKS AND THEIR CONTENT

Seven artefact assemblages, mostly consisting of fragile spiral tube decorations, but also ornaments, from two female burials (nos 3 and 5) and one cenotaph (no. 8) were taken as blocks (Table 1) and cleaned in the archaeology laboratory of the University of Tartu, Department of Archaeology. In the following paragraphs, the blocks from burials nos 3 and 5 will be discussed.

Block no. VII from burial no. 3, contained 'back apron' remains. Two new finds of 'back aprons' have been discovered in the south-eastern Estonian medieval village cemeteries in the last decade. One came to light on the pelvis of the first skeleton from Urvaste Ala-Kõrtsi cemetery in 2017 (Valk *et al.* 2018, 101–102), and the other was discovered in Loosi in 2023 (Valk *et al.* 2024, 158–160). Together with the new Urvaste find, thirteen similar specimens are currently known from south-eastern Estonia.

In the Urvaste burial no. 3, a rhomboid patch braided of tiny spiral tubes and a band of longer spiral tubes are preserved from this clothing accessory (Fig. 12). Probably small tin alloy studs, almost completely degraded by now and visible as greyish powder, were attached to the edges of the rhombus. This feature is also common to the other 'back apron' finds (Valk *et al.* 2024, 158–160). These rhomboid patches were attached to the tablet-woven belt and hung on the hips or on the back (*ibid.*). In burial no. 3, the remains of the dress accessory from under and beside the middle back may initially have been placed in the grave along with the dead as an additional grave good which was not attached to the waist area. Two rhomboid patches comprising a pair are mostly present in graves with remains of 'back aprons'. It is not possible to determine whether the Urvaste 'back apron' has been preserved only partially, was destroyed by ploughing, or only one patch was added to the grave.

Small remains of destroyed and unidentified spiral tube decorations were also in the small blocks, which were located on the lateral side of the left femur (block no. V) and beside the right ilium (block no. VI).

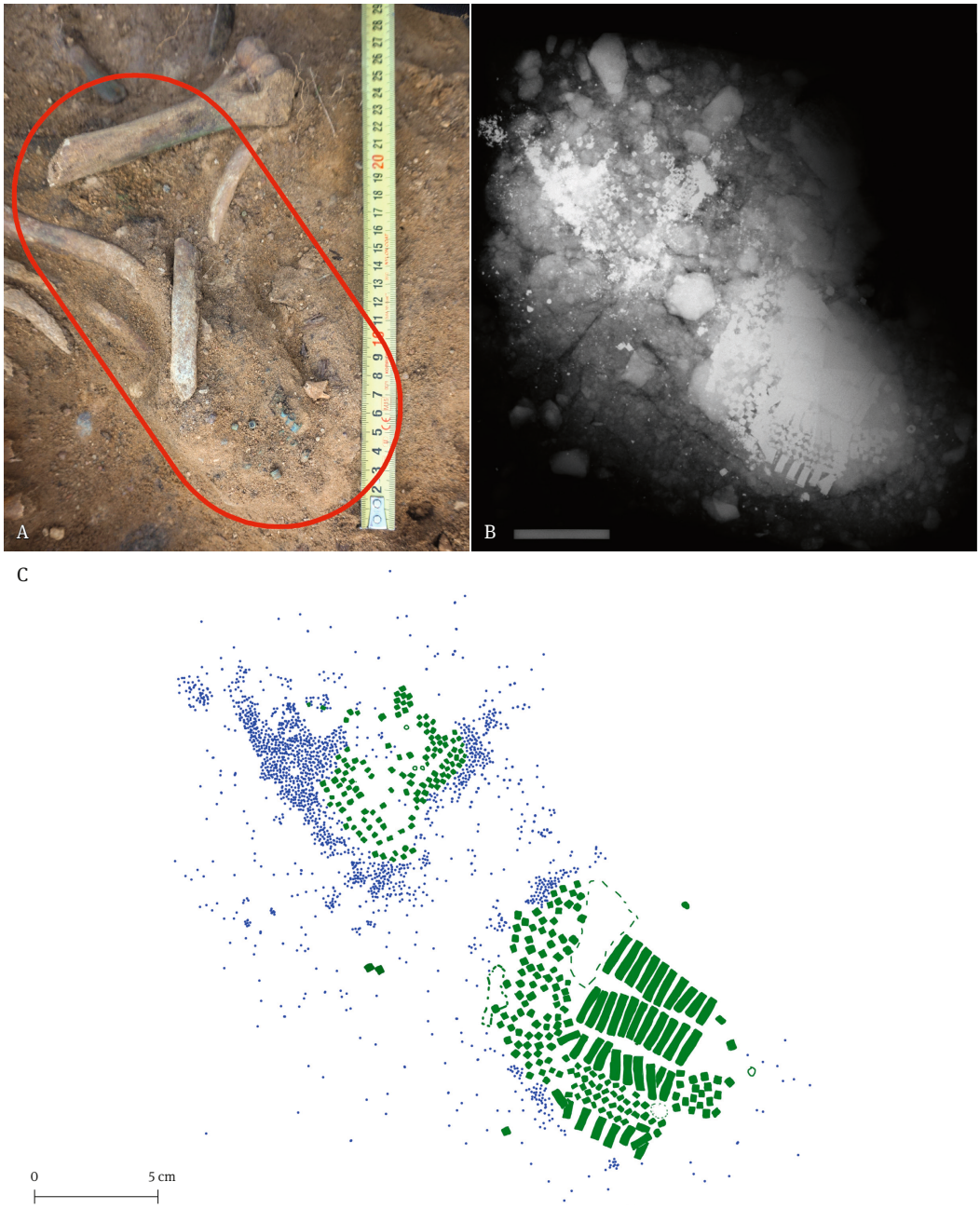

Fig. 12. *Block no. VII from burial no. 3. A – the block* in situ, *the red oval indicating the size of the block, B – an X-ray photo of the block, C – a drawing based on the X-ray photo. Blue – tin remains, green – copper alloy spiral tubes, the green dotted line – unclear areas.*

Jn 12. *Monoliit VII matusest nr 3. A – monoliidi paiknemine luustiku (matus nr 3) suhtes* in situ, *punane ovaal tähistab monoliidi piirjooni, B – monoliidi röntgenfoto, C – röntgenfotol põhinev joonis. Sinine – tinajäänused, roheline – spiraaltorukesed, roheline katkendjoon – hägusad alad.*

(TÜ 3257: 62.)

Photo / Foto: Martin Malve, block border / monoliidi kontuur: Marie Anna Blehner, X-ray photo / röntgenfoto: Andres Vindi, drawing / joonis: Kristel Kajak

Block no. IV, the largest one, was removed from the leg area of burial no. 5, and it also contained remains of a clothing item adorned with spiral tubes. The remains of the item in the form of several rows of parallel spiral tubes were found between and under the tibias. At first, it was thought that due to their location the adornments could originate from the leg wrappings. However, the spiral tube rows did not occur on the tibia, but were initially on the bottom of the coffin. Although textile remains were highly degraded, the spiral tubes were probably inserted onto weft yarns of a tablet-woven band while weaving. There are two ways to create such an edging: first, as a fabric's finishing band woven directly to the edges of cloth after weaving or, second, the band together with spiral tubes was made separately and attached to the fabric edges (Rammo & Ratas 2015, 73–76; Rammo & Ratas 2019, 133–136), for example, to the lower hem of aprons (Rammo 2006). In addition to spiral tubes, tin alloy studs were used in the case of the Urvaste textile item. Regrettably, the studs could only be detected as greyish powder in the ca. 1.3 cm wide zone, which could occasionally be seen along the spiral tube rows.

The textile item has been folded together, probably in four and placed as an offering and part of grave goods into the coffin. The garment seemed to have two opposite edges adorned with spiral tubes. Two rows can be distinguished, approximately 50 cm or longer, and two bending points can be seen on the right side of the block. Similar spiral tube rows are typical for edges of shawls in the 13th–15th-century Siksälä cemetery female burials (Valk & Laul 2014, 91–92; Matsin 2010); the spiral tubes have been woven directly to the ends of the fabric there. However, most of the Siksälä shawls were decorated, as typical for eastern Latvia, with bronze clips, and only two of them were adorned besides spiral tubes with tin studs and yellow seed beads (Valk & Laul 2014, 92). This find from Urvaste is remarkable, as shawl fragments are rare in southern Estonian medieval village cemeteries, except for Siksälä and Niklusmägi sites (*ibid*., 91–92; Valk *et al*. 2013, 124). Some loose spiral tubes were found in two other blocks (nos II and III) taken from burial no. 5.

OSTEOLOGICAL ANALYSIS

In total, six skeletons – five adults and one non-adult (Table 2) were osteologically analysed[2] from the site. The adults included three males, one female and one possible female. They were middle-aged or older and the non-adult was 1.5–4.5 months old at the time of death.

The skeletons were badly damaged due to ploughing. Only skeleton no. 6 was well preserved; others were heavily fragmented (especially no. 2) or only partially preserved (no. 5). Despite their fragmented state, it was possible to distinguish several pathologies on the bones. Predominantly, dental diseases were identified (e.g. dental calculus, caries, *ante mortem* lost teeth, periapical cavities). In some cases, also hypoplasia and alveolar reduction occurred. One adult male (no. 6) had a concave incisal surface on the right second incisor and the left first incisor of the maxilla as a result of some repetitive activity. He may have used his teeth to perform some sort of work. Due to advanced age, age-related ailments dominated the limb joints (osteoarthritis) and spinal joints (spondyloarthrosis) of four adults (nos 1–3, 6). Changes related to repetitive physical stress (Schmorl's nodes) were found on the thoracic and lumbar vertebrae of the same skeletons.

[2] The sex of the dead was determined according to the morphological traits on the pelvis and cranium (Buikstra & Ubelaker 1994, 16–20), maximum length of the long bones (Garmus & Jankauskas 1993, 6–8), and tarsal bones (Garmus 1996, 26). The age at death was determined according to tooth wear (Brothwell 1981, 72), pubic symphyseal face (Todd 1921; Brooks & Suchey 1990), auricular surface of the ilium (Lovejoy *et al*. 1985) and age caused changes on the limb joints (Ubelaker 1989, 84–87). The age of subadults was determined by examining the development and eruption of the teeth (AlQahtani *et al*. 2010) and epiphyseal fusion (Schaefer *et al*. 2009). Pathological conditions were identified based on Buikstra (2019) and Roberts & Manchester (2012). Stature was calculated according to the formula of Trotter and Gleser (Trotter 1970), using measurements of the humeri and femurs.

Table 2. *Osteological age, sex and pathologies of the recorded skeletons from Ala-Kõrtsi burial ground*
Tabel 2. *Ala-Kõrtsi matmispaigalt leitud luustike osteoloogiline vanus, sugu ja patoloogiad*
Compiled by / Koostanud: Martin Malve

Burial no. / Matus nr	Sex / Sugu	Age / Vanus	Pathologies / Patoloogiad	Stature / Kehakasv (cm)
1	♂	35–45 y / a	Osteoarthritis of limb joints, spondylosis on the 1st–12th thoracic vertebrae, 1st–5th lumbar vertebrae and 1st sacral vertebra, spondyloarthrosis on the 3rd–7th cervical vertebrae, 1st–12th thoracic vertebrae, 1st–5th lumbar vertebrae and 1st sacral vertebra, Schmorl's nodes on the 1st–12th thoracic vertebrae and 1st lumbar vertebra, compression of the bodies of the 11th–12th thoracic vertebrae, healed sinusitis, enthesophyte on the antero-lateral side of the proximal ⅓ of the left humerus, enthesophyte on the posterior side of the midshaft of the left femur. **Teeth:** slight dental calculus, caries, periapical lesion, *ante mortem* lost teeth, hypoplasia.	172.09±4.05 (right humerus)
2	♂	60+ y / a	Osteoarthritis of limb joints, spondylosis on the 1st–12th thoracic vertebrae, 1st–5th lumbar vertebrae and 1st sacral vertebra, spondyloarthrosis on the 2nd–7th cervical vertebrae, 1st–12th thoracic vertebrae, 1st–5th lumbar vertebrae and 1st sacral vertebra, probable spondylitis ankylosis of the sacroiliac joints, porosity, osteophytes and lytic lesions on the distal joints of the ulnae and left I metatarsal, osteophytes, eburnation and deformation on the distal joint of the left radius and on the left lunatum, probable healed non-specific lesion on the posterior side of the proximal ⅓ of the left tibia, new active non-specific bone formation in the maxillary sinuses, new active non-specific bone formation around foramen of the great wings of the sphenoidal bones and in the sphenoidal sinuses. **Teeth:** slight dental calculus, caries, periapical lesion, *ante mortem* lost teeth, alveolar reduction, all remaining teeth are severely worn, most of them only have the root parts.	168.39±4.05 (left humerus)
3	♀	40–50 y / a	Slight osteoarthritis of the knee joints, spondylosis on the 5th lumbar vertebra, Schmorl's nodes on the 5th–7th, 9th–12th thoracic vertebrae and 1st–4th lumbar vertebrae, ankylosis of the right sacroiliac joint, new non-specific bone formation on the left tibia at the border of the proximal and middle ⅓ of the diaphysis on the medial side measuring 98 × 31.95 mm, new active non-specific bone around foramen of the great wings of the sphenoidal bones and in the sphenoidal sinuses, new active non-specific on the inner surface of the left side of the frontal bone in two separate areas. **Teeth:** slight dental calculus.	158.09±3.72 (left femur)
4	?	1.5–4.5 m / k	New bone formation reflecting endocranial lesions or normal bone growth on the internal surfaces of the skull bones.	-
5	♀?	Adult / Täiskasvanu	-	-
6	♂	35–45 y / a	Spondylosis on the 2th–12th thoracic vertebrae, 1st–3rd and 5th lumbar vertebrae, spondyloarthrosis on the 1st–12th thoracic vertebrae, Schmorl's nodes on the 2nd lumbar vertebra, spondylolysis on the 5th lumbar vertebra, non-specific lesions on the inner table of the frontal bone. **Teeth:** slight dental calculus, hypoplasia, caries, *ante mortem* lost teeth, the cutting surface of the maxillary right second incisor and the left first incisor have worn concave.	173.03±3.27 (right femur)

Other significant pathologies included the identification of new active non-specific bone formation around the foramen of the great wings of the sphenoidal bones (Fig. 13) and in the sphenoidal sinuses of two adult skulls (nos 2–3). The latter had new active non-specific bone formation on the inner surface of the left side of the frontal bone in two separate areas (Fig. 14) as well. New bone formation indicates that the pathology was active at the time of death, but since it is a non-specific feature, it cannot, unfortunately, be associated with a specific disease.

The older adult man (no. 2) and woman (no. 3) had severely worn-out vertebral bodies (osteophytes) and ankylosis of the right sacroiliac joints. Ankylosis could be caused by diseases such as diffuse idiopathic skeletal hyperostosis (DISH), ankylosing spondylitis and traumatic arthritis (Aufderheide & Rodriguez-Martin 1998, 97, 102, 105). These individuals

likely suffered from ankylosing spondylitis, probably related to their advanced age.

In the course of the osteological analysis, commingled human bones – 798 wholly preserved bones or fragments were also examined. Only age-related pathologies were detected on the commingled bones (e.g. osteoarthritis, spondyloarthrosis). The commingled bones included 30 permanent teeth and one deciduous tooth. The same pathologies were identified on the commingled human remains that were also found on the *in situ* skeletons. Dental calculus was present on the commingled teeth.

During the osteological analysis, 87 burnt bone fragments were also documented. These were predominantly indeterminate skeletal fragments or came from long bones. Most of the bones had burned white, but there were also some black, bluish-gray, beige, and brownish items. The white bones had transverse and curved cracks. Among the documented bones were also some neurocranium fragments (e.g. frontal bone, occipital bone, parietal bones) and two fragments of a mandible. The long bones were probably fragments of a humerus and a femur.

Fig. 13. *New active non-specific bone formation around the foramen of the great wings of the sphenoidal bones (skeleton no. 2).*
Jn 13. *Uus mittespetsiifiline luukude kiilluu suurtel tiibadel ja urgetes (matus nr 2).*
Photo / Foto: Marie Anna Blehner

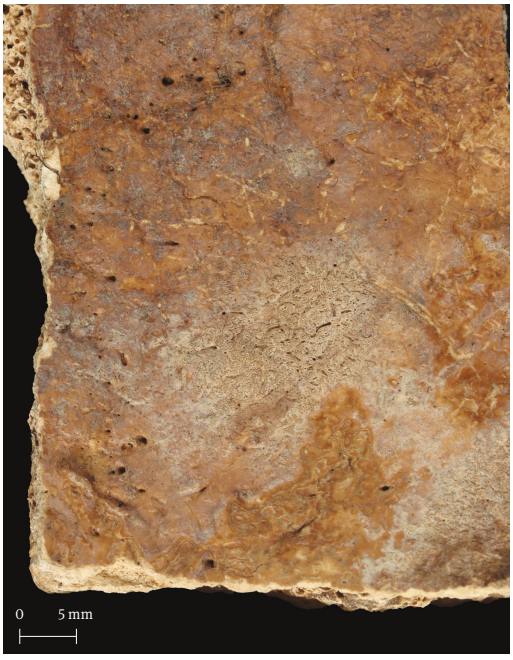

Fig. 14. *Non-specific lesions on the inner table of the left side of the frontal bone (skeleton no. 3).*
Jn 14. *Mittespetsiifilised haiguskolded otsmikuluu vasaku poole sisepinnal (matus nr 3).*
Photo / Foto: Marie Anna Blehner

DISCUSSION AND CONCLUSIONS

The find assemblage from Urvaste Ala-Kõrtsi cemetery as a whole corresponds to that gained in 2017, indicating the use of the burial site in the 13th century. The numerous bracelets and spiral rings with a flat broad middle coil, as well as the absence of spiral rings typical for the medieval village cemeteries of southern Estonia (see Valk 1991, 185–186, pl. XXVI: 2–4, 7, 8; Valk 2001, 48–49, pl. XI: 1–3) refer to the early use of the burial site. The excavation results of 2024 confirmed the earlier impression that inhumation burials began in the cemetery only after the Christianization of the Ugandi province in 1215 (HCL XIX: 7) and that using the site generally ended probably in the second half of the 13th century, although the presence of some later burials from the first half of the 14th century cannot be excluded. Most likely, the site was deserted because of the establishment of the

Christian parish churchyard in the vicinity. The discovered cenotaph grave is the only known case of such burial practices from the rural cemeteries of Estonia of the Christian period.

The north-east oriented female burials, the earliest known among such in the medieval village cemeteries of southern Estonia, show that the opposite orientation of sexes existed in Võrumaa already in the mid-13th century and support the formerly somewhat hypothetical suggestion that the roots of the practice lie in the pre-Christian times.

Among the finds, the remains of silver jewellery must be outlined. The discovered fragments of silver bracelets are a valuable contribution to four similar finds from 2017 (Valk *et al*. 2018, 104). These finds, as well as a crumbled part of a silver sheet pendant, indicate not only the richness of some destroyed graves, but also extensive damage made to the site by illegal looting. The new finds of silver jewellery items give evidence of the prosperity of the community and a high social status of at least some of its members. Forthcoming studies based on ancient DNA are expected to shed light upon the question of kinship ties between the people who were buried on the earliest known post-Crusade Christian burial site in the late prehistoric Ugandi province.

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URVASTE ALA-KÕRTSI KALMISTU 13. SAJANDIST

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Tartu Ülikool tegi 2024. aastal proovikaevamisi Urvaste Ala-Kõrtsi kalmistul, mis asub kihelkonnakirikust ligi 450 m kaugusel (jn 1). 2017. aastal uuriti tugevasti rüüstatud muistisel üht naisematust ja koguti hulk juhuleide, uued uuringud toimusid piirkonnas, kust varem oli teada hulk detektorileide. Haualaikude otsimiseks kaevati mäele neli tranšeed kogupikkusega 50 meetrit (jn 2); samuti tehti täiendavaid detektoriuuringuid. Kogu pinnas sõeluti, orgaanika- ja rõivajäänused võeti üles monoliitidena (tabel 1), mis avati Tartu Ülikooli arheoloogia laboris.

Tranšeedes joonistusid välja kaheksa matuse haualaigud. Kaevamistel puhastati välja kuus 25–44 cm sügavusel asuvat, künniga kahjustatud luustikku, millest viis paiknesid lähestikku (jn 3) ning fikseeriti ühe ligi 70 cm sügavusel oleva matuse olemasolu. Vana mehe, vanema naise ja viimase vaagnaluudel oleva imiku kolmikmatuses (luustikud 2–4) olid mees ja naine maetud peadega vastandsuunas – mees peaga edela, naine kirde poole (jn 4), järgides Võrumaa 13.–17. sajandi külakalmistutel esinevat soolise vastandorientatsiooni tava. Naisel oli kaelas kaurikarpidest ja kudrustest kaelakee, rinnal hoburaudsõlg (jn 5: 1), parema käe keskmises sõrmes ja vasaku käe viiendas sõrmes sõrmused (jn 5: 2, 3) ja selja all nuga (jn 5: 4). Vasaku käe segatud, roheliseks värvunud luud viitasid varasemal detektorirüüstel eemaldatud käevõru(de)le. Naisehauast pärit kaurikarpe ja spiraaltorukesi oli künniga nihutatud ka panusteta mehematuse alale.

Naise luustiku selja alt ja vasakult küljelt võetud monoliidist leiti laboratoorsetel uuringutel nn tagapõlle jäänused (jn 12). Need koosnesid ühest spiraaltorukestest põimitud rombjast mustrilapist ja pikematest spiraalikestest vööndist. Enamasti kuulub nimetatud aksessuaari juurde kaks rombjat mustrilappi. Jäi ebaselgeks, kas teine mustrilapp on hävinud kündmise tagajärjel või oli surnule kaasa pandud vaid üks.

Künniga peaaegu täiesti hävitatud, peaga kirdesse suunatud naisematusest (nr 5) olid algses asendis vaid sääreluud, mille alt leiti neljas reas paiknevate vasesulamist spiraaltorukestega ja tinulistega kaunistatud rõivaeseme jäänused (jn 6). Monoliidina üles võetud kogumi väljapuhastamisel ilmnes, et arvatavasti oli tegemist neljaks kokku volditud, hauapanusena kirstu põhja asetatud ja kahest otsast spiraaltorukestest kaunistusribadega ääristatud rõivaesemega, tõenäoliselt sõbaga. Samast luustikust oli paigast nihutatuna säilinud vasaku labakäe luid, mille juures oli rauast spiraalsõrmus (jn 7: 1) ning matuse asukohas künnikihis oli veel kaks sõrmust (jn 7: 2, 3). Peaga edelasse suunatud mehematuse (nr 1) juurest panuseid ei leitud – kaks üksteise sisse pistetud poollaia käevõru oli eemaldatud juba varasematel detektoriuuringutel. Teise üksiku ja samuti edelasse orienteeritud mehematuse (nr 6) rinnalt leiti hoburaudsõlg (jn 8: 1), selja alt nuga (jn 8: 3), vasaku sääreluu kõrvalt väike pronkspannal (jn 8: 2) ning jalutsist väikesest raudpandlast ja ovaalsest tulekiviga tulerauast tekkinud roostekängar.

Eriline leid oli Lõuna-Eesti külakalmistute seni ainus kenotaafmatus. Proovitranšees leiti maapinnast 55 cm sügavusel ühe kogumina kaks poollaia käevõru ning laia kilbi ja „vuntsidega“ sõrmus (jn 9, 10: 1–3). Tranšee mõlemas profiilis jälgitava sissekaeve laiendamisel joonistus välja kuni 160 × 50 cm mõõtmetega kirde–edela-suunaline haualaik. Selle põhjast, käe-

võrudest 40 cm kauguselt leiti nuga (jn 10: 4), haua kirdepoolsest otsast aga ovaalne tuleraud koos kahe tulekivitükiga (jn 10: 5, 7) ja raudpannal (jn 10: 6). Nii käevõrude ja sõrmuse kui ka tuleraua ümbruses leidus tumedat mulda, mis viitas kõdunenud, võimalik et rõivaesemest pärit orgaanikale. Kuna haua piirest ei leitud ühtegi luujäänust, on ilmselt tegemist sümboolse matusega.

Täiendavad detektoriuuringud andsid üksikuid väiksemaid, valdavalt 13. sajandist pärit juhuleide (jn 11), millest märkimisväärseimad on kaks hõbedast käevõru tükki ja ümara hõbedast rinnalehe katke (jn 11: 1–3).

Osteoloogiliselt analüüsiti kuus skeletti, mis kuulusid viiele keskealisele või vanemale täiskasvanule ja ühele 1,5–4,5 kuu vanusele imikule (tabel 2). Maetute seas oli kolm meest, üks naine ja üks oletatav naine. Skeletid olid kündmisega tugevalt kahjustatud. Ainult luustik nr 6 oli terviklik, teised olid tugevalt fragmenteerunud (eriti nr 2) või vaid osaliselt säilinud (nr 5). Patoloogiatest tuvastati luustikel hambahaigusi (nt hambakivi, kaaries, eluajal kaotatud hambad, periapikaalsed tühimikud), ühel juhul ka hüpoplaasiat ja alveolaarkaarte taandumist. Ühel täiskasvanud mehel (nr 6) oli ülalõualuu parema teise lõikehamba ja vasaku esimese lõikehamba lõikepind kulunud lohku mingi korduva tegevuse tõttu.

Luudel domineerisid vanusega seotud vaevuste jäljed, mida täheldati jäseme- (osteoartriit) ja selgrooliigestel (spondüloartroos). Neljal täiskasvanul (nr 1–3 ja 6) leiti korduva füüsilise koormusega seotud muutusi lülisambal (Schmorli sõlmed). Märkimisväärsete luuliste muutustena tuvastati kahe täiskasvanu (nr 2 ja 3) kiilluude tiibade toitemulkude ümbruses (jn 13) ja urgetes uut mittespetsiifilist luukudet. Täiskasvanud naise (nr 3) otsmikuluu vasaku poole sisepinnal oli samuti uut mittespetsiifilist luukudet kahe eraldi laiguna (jn 14). Luulised muutused olid surma hetkel aktiivses staadiumis, kuid neid pole võimalik seostada mingi konkreetse tõvega. Vanemal täiskasvanud mehel (nr 2) ja naisel (nr 3) olid selgroo lülikehadel luukasvised ja sakroiliakaalsete liigeste anküloos. Mõlemad põdesid tõenäoliselt anküloseerivat spondüliiti, mis on arvatavasti seotud maetute kõrge eaga.

Irdseid inimluid oli 798 luud või luukatket, 30 jäävhammast ja üks piimahammas. Segatud luudel tuvastati mõneti hambakivi, osteoartroosi ja spondüloartroosi. Osteoloogiline aines sisaldas ka 87 kremeeritud inimluu fragmenti. Enamik skeletiosi oli valgeks põlenud, aga leidus ka musti, sinakashalle, beeže ja kergelt pruuniks põlenud luid. Põlenud luude seas domineerisid määramatud luukatked ja toruluude fragmendid, kuid leiti ka mõned ajukolju osad (nt otsmikuluu, kuklaluu, kiiruluud) ning kaks lõualuu fragmenti.

Urvaste Ala-Kõrtsi kalmistu uued leiud kinnitavad varasemat muljet, et matusepaik on alguse saanud 13. sajandil pärast Ugandi ristiusustamist ja et selle kasutamine lõppes 13. sajandi teisel poolel, tõenäoliselt seoses kihelkonnakiriku ja seda ümbritseva kalmistu rajamisega. Samas ei lase 2017. aasta leiud välistada ka üksikuid 14. sajandi algupoole järelmatuseid. Meeste ja naiste soolise vastandorientatsiooni tõdemine juba 13. sajandi keskpaiku annab tuge varasemale oletusele, et kombe algupärad ulatuvad tagasi ristiusueelsesse aega. Kalmistult juhuleidudena saadud hõbeehete katked annavad ühest küljest tunnistust vähemalt mõnede maetute kõrgest sotsiaalsest staatusest, teisalt aga varasemate detektorirüüstetega tekitatud kahju ulatusest.