

MARISIA

Studii și materiale

XXX

Arheologie

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The fibula from Suseni (Photo: B. Rezi)

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The brick kiln from Cristești, Mureș County (Photo: C. D. Crișan & D. Cioată)

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BURIALS IN THE TÂRGU MUREŞ FRANCISCAN FRIARY. A FOURTEENTH CENTURY BURIAL WITH DIADEM

ZOLTÁN SOÓS–SZILÁRD SÁNDOR GÁL

Mureş County Museum, Târgu Mureş

Keywords: burial, Franciscan friary, grave inventory, discs, anthropology

The excavation of the former Franciscan friary in Târgu Mureş (Marosvásárhely), revealed a number of unique and important artefacts and objects in the last decade.¹ A particular case was found in the graveyard of the former friary. The excavation of the friary's courtyard initially focused on the former well, identified on the Austrian military map from 1740. This is the first reliable ground plan of the seventeenth century castle and of the buildings within the walls. The castle included the former Franciscan site as well, with the friary situated at the south-western corner of the castle (Fig. 1).

The C28 archaeological trench was excavated on the place of the former well, which appeared in the north-western corner of the trench at 0.8 m depth. Its wall is made out of limestone and round shaped rocks from the river. The well (Pl. 1/1) was 11 m deep and 1.2 m wide and based on the material found in the filling, we could establish that it was in use up until the 1920's. We have found bullets from the First World War and a military hat ornament representing the Hungarian coat of arm, these objects offered a solid ground to establish when the well was filled up. Besides the identification of the well our main goal was to find out since when it was in use.

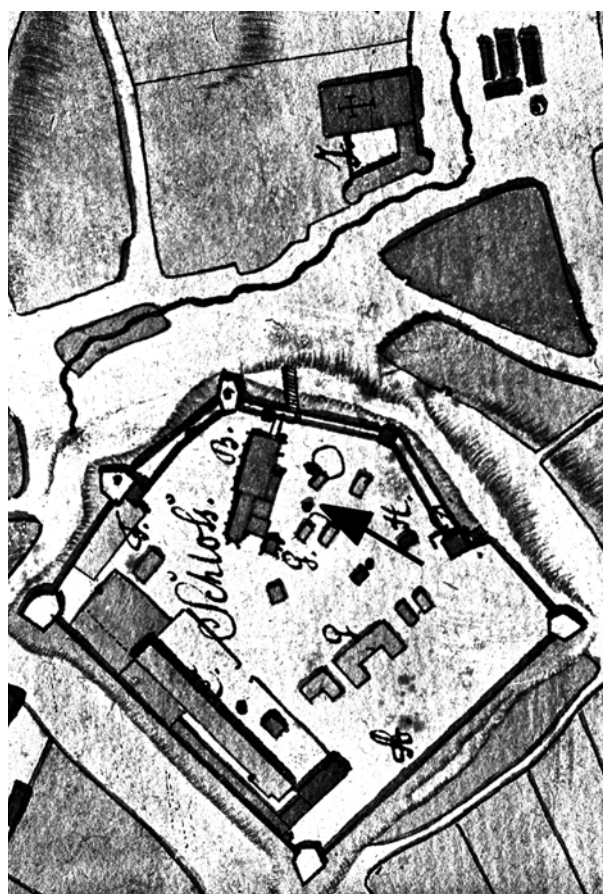


Fig. 1. The Austrian military map of the castle from 1750. The position of the friaries well is marked with an arrow.

¹ The excavation of the former Franciscan friary is supervised by Prof. Adrian Andrei Rusu, it is lead by the author of this article. During the 2008 excavation two archaeologists Zalán Győrfi and Rita Németh were the crew members.

The inside of the well could not offer any details regarding the construction data as it was in use and therefore it was regularly cleaned. The well's construction technique brought the necessary clues for the chronological questions. The walls of the well were built of river stone and lime stone. In order to elevate this 11 m deep structure they first dug a deep trumpet shaped whole. The whole was narrow on the bottom and approximately 5 m wide at the top, ensuring in this way the safety of the builders. As the well's wall was erected the trumpet shape whole around it was filled up and compacted with clay. This filling contained a few archaeological artefacts: pottery and a few stove tile fragments. Based on the recovered archaeological material the construction of the excavated well can be dated somewhere at the beginning of the 16th century. Nevertheless this does not mean that the well could not exist on the same spot before this date, it rather means that it was rebuilt at the beginning of the 16th century, in the place of an older one. Still we can question since when there is a well on this very spot because south and east to it we have identified a number of skeletons from the friary's cemetery.

It seems that we have identified the earliest graves of the friary, dated with two 14th century coins (Fig. 2). One coin belongs to King Charles Robert d'Anjou (1308–1342) from the 1330's and the second coin belongs to his son Louis the Great (1342–1382) and it was released in the 1370's.²



Fig. 2. 1. Denarius of Charles Robert from 1327. 1a. Front side with Angevin Coat of Arm; 1b. Back side with a royal figure; 2. Denarius of Louis the Great (1373–1382); 2a. Front side with the Hungarian double cross; 2b. Back side with the Arabian head.

² Unger 1997.

The presence of these two coins in this area means that in the fourteenth century the cemetery was still here and only a few decades later this area could be use for the building of the well. This also means that the friary should have another abandoned well somewhere and we suppose that the Franciscans would not build a well in a functioning cemetery, so the area was not used as a cemetery when the well was built. However the excavation of the well brought other more important information regarding the first functioning period of the friary from the fourteenth century, before the new, large, existing friary church was built at the beginning of the fifteenth century.

The cemetery

The surface of the C28 was 25 m², it was square shaped, 5 × 5 m. In the north western third of the trench we have found the well and the construction pit, besides these we identified in the southern and eastern part of the trench the burials. Twenty graves were unearthed on a 20 m² area. Some of the graves were incomplete either because they were partly outside the trench or because they were destroyed when the well's pit was dug.

In the southern side of the C28 we have identified the foundation trench of an east–west oriented wall. The wall was situated 0.8 m far from the southern profile of the C28 and it was completely demolished. It is also possible that it was never built only its foundation trench was dug. However the trench sectioned and disturbed a few graves.

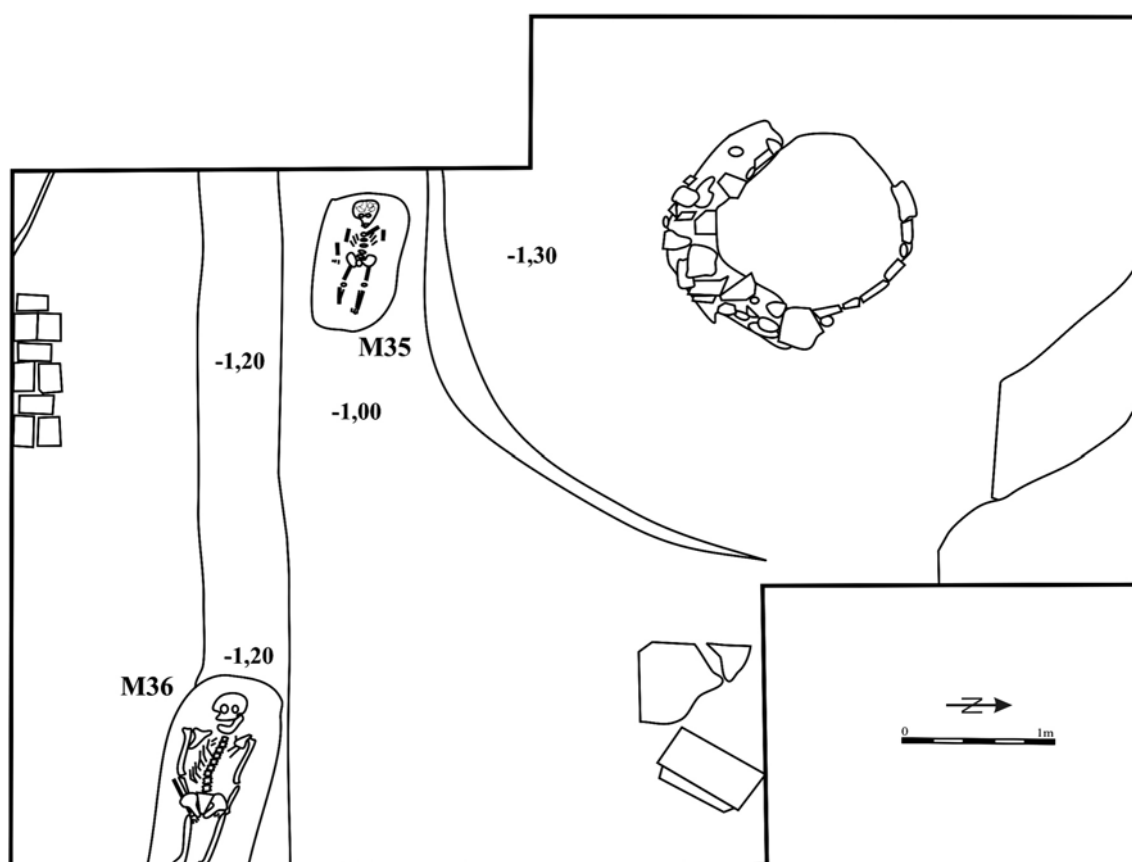


Fig. 3. The first layer of the C28 with the well and the first burials.

At 0.9 m depth besides the well's pit we identified the first grave (M35). It belonged to a child; the remains of the skeleton were 0.85 m long having the teeth well preserved. The second identified grave M36 (age 28–30) was in the 4/a–b sector at 1.2 m depth. It is a well preserved male skeleton; it has 1.25 m length from the skull till the knees, starting from the knees his legs were outside of the trench. His left hand was placed along the body, while his right hand was on the pelvis. These two graves represented the first burial horizon. The grave M37 was identified in the south western corner (5/e) and we have found only a skull, the rest of the skeleton was outside the trench. Below the first layer we identified a second layer with sixteen medieval graves from the 14th century (Pl. 1/2).

The grave M38 (age 50–55) was situated eastwards from M35, the skeleton was oriented towards northeast–southwest, while most of the others are oriented east–west. It is a male burial, the skeleton is only preserved until the pelvis and it is cut by the grave M39. The length of the preserved skeleton is 0.8 m; the distance between the shoulders is 0.4 m. Both hands are placed on the pelvis.

The M39 lays eastwards from the M38, contains a well preserved male skeleton. The length of the skeleton is 1.72 m (with fingers), the shoulders are 0.41 m wide. The hands are placed on the pelvis across each other. The particularity of the grave is the identification of a Charles Robert coin from 1327, identified in the pelvis area. The male (probably friar) was approximately 45–50 years old.

The grave M40 was identified in the eastern profile, only the upper part of the skull was found, the rest of skeleton is outside the trench. The M40 grave pit cut the legs of the grave M41. The M41 (age 15–17) is preserved partially until the pelvis, its length is 0.72 m, the shoulders are 0.27 m wide and it belonged to a young male. The hands were placed along the body.

The grave M42 (age 35–40) situates on the left side (north) of the M39. The length of the skeleton is 1.64 m; the width at the shoulders is 0.41 m. The hands were placed along the body and based on the anthropological analysis this is also a male burial.

The M43 (age 60–65) is on the left side (north) of M42, its length is 1.50 m, the shoulders are 0.34 m wide. The skeleton belonged to a male person, which lost all his teeth by the time of his death. His right hand was placed on the chest, while his left hand was along the body.

The grave M44 (age 40) is 0.89 m long and the shoulders are 0.42 m wide. The skull is missing, only the maxilla was preserved. It seems that the M43 disturbed the upper part of the grave. The left hand is placed on the pelvis, while the right hand is along the body. Based on preserved teeth the skeleton belonged to a male person.

The grave M45 (age 10–12) has 1.24 m length and 0.33 m width at the shoulders. The grave is oriented south–west–north–east and it contains the bones of a young child. The arms of the child were placed on the chest.

The grave M46 (age 45–50) has 1.55 m length and 0.4 m width at the shoulders. The grave is situated south of M39; it has a well preserved robust skeleton. Based on the characteristics of the skeleton it belonged to a male person. The M46 is particular because of the wounds on the left zygomatic bone. His left hand is placed along the body and it is a little bit curved, his right hand is missing, it was probably cut by the grave M49.

The grave M46/a is south to M46, only its skull was preserved in a secondary position and it was probably disturbed by the grave M46. The skull was found near the pelvis of M46. Based on the maxilla characteristic features the skull belonged to a male person.

The M47 (age approx. 50–55) is situated 0.2 m west of M46, only the bones of the right hand, the tibia bones and partly the ankle bones were preserved, the rest of the grave was destroyed by the trench. Based on the characteristics of the tibia bones and on the femur the skeleton belonged to an adult male person.

The grave M48 had 1.57 m length and belonged to a female. The M49 is situated south of M46 and M47, its length until the knees is 1.2 m, it appears to be a male burial. The right side of the skeleton was in the southern profile. The skull of M49 is poorly preserved, the rest of the bones were in a better shape. The left hand is placed along the body. The grave was identified at the depth of 1.5 m.

The grave M50 was identified in the north eastern part of the trench, together with the grave M51. They were placed beside each other; both skeletons are preserved from the pelvis until the ankles. Their upper part is destroyed by the foundation pit of the well, while their lower side was cut by grave M45. The M50 is 0.96 m long, representing the bones of the legs and the pelvis, the M51 is 0.9 m long only the right pelvis and ankle bones are preserved, on the left side only the bones belonging to the leg were found.

The most important burial artefacts were discovered in grave M52 that based on the morpho-taxonomical analysis belonged to a young, ten years old female. The skeleton had approximately 1.14 m length, the bones, except the skull were poorly preserved. From the skeleton the skull, partly the bones of the limbs and the pelvis were preserved. The hands are placed along the body. The uniqueness of the grave stands in the diadem, laid on the forehead. The diadem is consisted of bone-made pearls and eight bronze discs out of which seven preserved. Four discs represent a deer, two lily symbols represent the Angevin coat of arm and one disc has a solar symbol. The bronze discs left significant green coloured marks on the frontal bone of the skull.

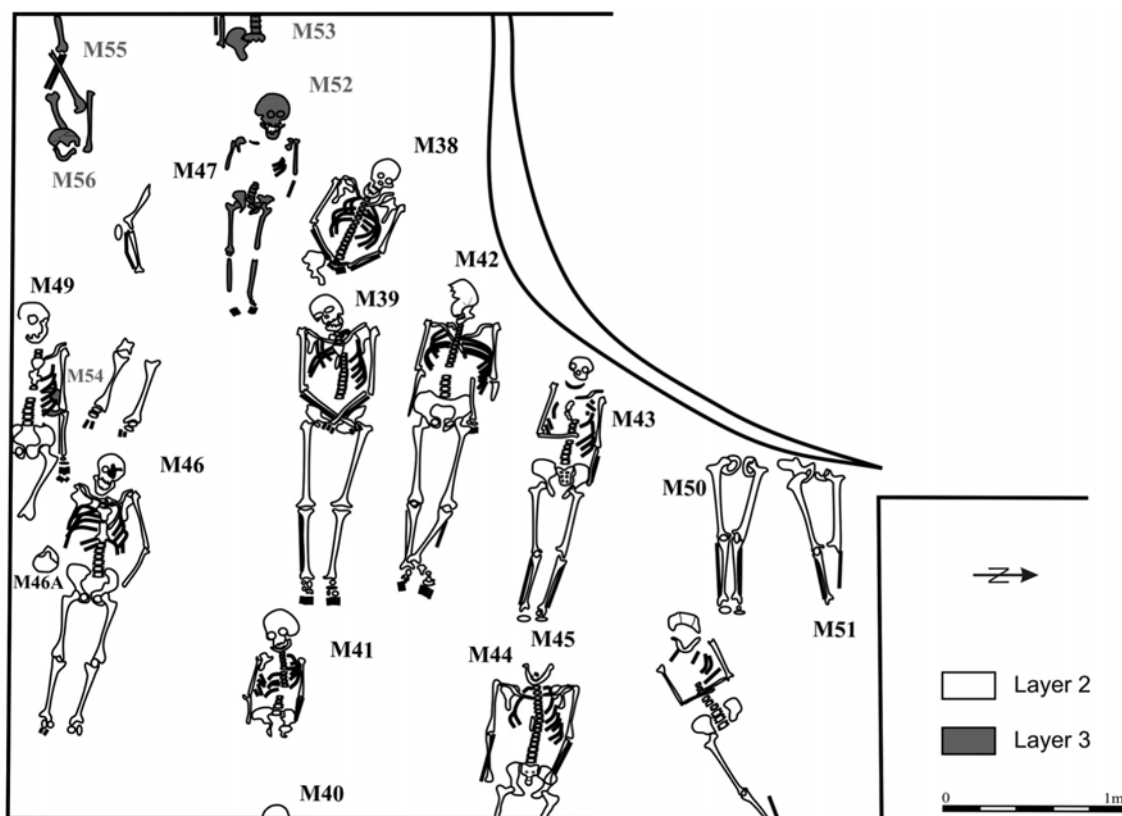


Fig. 4. The second and third layers of the C28 with the grave M52.

The grave M53 is west of M52 and only the right pelvis bone, the right hand and a few vertebrae were preserved. The upper part of the skeleton was in the western profile while the lower part is destroyed by the M52. Because of the low number of the bones the gender of the person is undeterminable.

The grave M54 is situated in the south-eastern part of the trench near the southern profile at the depth of 1.15 m. Only the skull and some rib fragments were preserved from the skeleton. Most of the grave was destroyed by the grave M49.

The last two graves are M55 and M56, both are situated in the south-western corner of the C28. The bones were found in one grave pit, but they belong to two individuals. The anthropological analysis of the bones revealed that the remains belonged to a 2–3 years old child (M56) it was preserved his skull and we have the bones of a 18–23 years old young female. The two skeletons belonged to a mother and her child.

Based on the identified graves and their analysis in the archaeological trench C28 we have 22 burials and burial fragments, out of which 4 were so fragmentary that it was not possible to establish the sex of the individuals. 11 burials belonged to adult male persons, in 2 graves female skeletons were identified and the rest of 5 skeletons were children burials. Out of the five children burials the M52 was the best preserved and based on the anthropological analysis we can establish that it belonged to a young female. The feminine character of the burial was strengthened by the presence of the diadem in grave.

In the Hungarian historiography it was several times debated whether the position of the hands in the grave could have any meaning. Some argued that this could have a special significance or it is part of an ancient habit but finally it was proved that the position of the hands is completely random and it is not probable that they had any meaning³. The random character of the hands' position is revealed in the case of the Târgu Mureş burials as well, as we have 3 graves where the hands were placed on the pelvis, 5 burials when the hands were placed along the body, in case of 2 burials the hands were placed on the chest, in case of 2 skeletons the hands were mixed one along the body and one on the chest. The rest of the 9 graves were fragmentary preserved, therefore we could not identify the position of the hands.

The large number of the male burials proves that the cemetery was first of all used by the friars. In a number of cases male burials could belong to the donors as well. It is almost impossible to establish about a burial if it belongs to a friar or a donor, since the number of the artefacts in the graves is very low according to the medieval burial habits. Therefore there is no difference between the grave of laic or church people.

The presence of child burials means that in some cases members of important donor families or influent people could be buried in the friary's graveyard in case of the donation of money or other goods. Seven graves out of 22 belonged to laic people if we take into account the five children and the two female. We assume that at least two or three male persons could be the father of these children meaning that out of the 22 identified burials 10–11 belonged to non friars. This means that only around 50% of the burials belonged to friars and the rest of the burials belonged to donors. Although in the case of the friary from Târgu Mureş we have no written sources about the income of the friars, from other cases we know that this represented an important part of the friaries' budget. In some cases we know about trials between the parish church and the friary because of the burial rights within a settlement.⁴ In case of Târgu Mureş

³ Hatházy 2004; Selmeczi 1992.

⁴ It is the case of the friary from Sibiu/Nagyszében.

we assume that the friary was in one hand very popular and powerful enough to obtain burial rights versus the parish church, while on the other hand we believe that only a wealthier class or in exchange of a donation was somebody buried in the friary's graveyard. Probably further excavations will reveal more data not only about the percentage of laic and church people burials but also about the possible family connections within the graveyard.

The grave M52

The grave's (Pl. 1/3–4) particularity is given by the rare accessories we have identified during the excavation of the skeleton of an 8–10 years old female with the remains of a diadem around her skull (Fig. 5). The diadem consisted of 8 discs and 38 bone made pearls. The pearls were probably placed on a thread and surrounded the discs. Both the discs and the pearls were put on a textile that surrounded the head of the lady. The discs were confectioned from bronze and very probably they were silver plated (Pl. 2).

The discs were found on the skull and because of the oxidation their green coloured traces were well preserved (Pl. 3). Unfortunately we do not exactly know the original arrangement of the bone pearls as the textile support vanished during the centuries, but the bronze discs got stocked on the skull therefore we know their exact place. We have eight marks on the skull meaning that there were eight discs. During the excavation we could recover only six discs that were better preserved and one fragment from the seventh disc. The eighth disc was completely destroyed



Fig. 5. The *in situ* discs and bone pearls on the skull of M52.

and we could not establish what kind of figure was printed on it. In total we have three kinds of figures, one has a solar symbol, than a heraldic symbol with the Angevin lily and the third figure represents a running deer. The solar symbol is preserved on one disc, on two discs we have the lily symbol and on four including the fragment we have the figure of the deer. The diameter of the discs is around 3 cm. They were produced by pressing.

The analysis of the diadem requires a comparison to other similar finds from the 14th century Hungarian kingdom. We need this larger horizon because in Transylvania it is for now a unique find from the 14th century and all the other analogies are from distant regions, most of them from the central part of the kingdom in the area inhabited by the Cumans in the Middle Ages.⁵ Due to their burial habit they placed in much higher proportion different artefacts in the

⁵ Hatházy 2004.

graves than other communities, although they were also Christians at that time already. We have a larger concentration of these types of diadems and discs at the burials of the Cuman communities. Of course this is not relevant for the everyday use of the diadems and discs; about this we have no references. Although we have a few analogies from other regions none of the identified graves contains the same combination of discs and none of them contains all the three types together. We have analogies for each symbol apart but they appear in other combinations. It seems that the combination of the discs had no special meaning and the discs were combined randomly. This is true in case of the diadem from Târgu Mureş, as well. The figures on the discs are rather influenced by the contemporary fashion and art and one can find them in different contexts such as on stove tiles, floor tiles, manuscripts or even tapestries. This is the case of the very wide spread deer depiction. The figure of the running deer is widely used, it is a popular decoration motif and it could have been borrowed from different hunting scenes from tapestries or manuscripts. The same type of decoration one can see on the late 14th century stove tiles of the royal castle of Diósgyőr,⁶ or on the floor tiles of the Visegrád royal chapel.⁷ On several hunting scenes one can see a very similar depiction of the running deer as it is on the discs, stove tiles or floor tiles.

The second figure represents a heraldic symbol, that is again very wide spread in the whole Central and Western Europe and it represents a lily borrowed from the Angevin coat of arm. The Anjou family reaches the peak of its power and popularity in the 14th century, they became a very influent family from the Hungarian kingdom to Italy and France, therefore it is easy to understand the popularity of the Anjou lily symbol among the decoration symbols and figures. Just as in case of the deer the lily appears on stove tiles, floor tiles⁸ and of course on many other items and artefacts as well. In the case of the lily analogies from other diadems are also known. Its form is a little bit different on the discs discovered at Kiskunhalas–*Fehértó*⁹ and Perkáta–*Kőhalmi-dűlő*,¹⁰ but they were produced with the same technique and probably in the same area.

The third figure represents a solar symbol. This is also a well known decorative figure although it is not so widely used as the previous two figures. The solar symbol has an excellent analogy in the medieval cemetery of Dražovce/Zobordarázs in Slovakia.¹¹ Two types of discs were identified here one with the already mentioned solar symbol and one representing Meluzina the mythological queen. The discs from Dražovce/Zobordarázs are the closest analogies for the discs discovered in Târgu Mureş and it is possible that they were produced in the same workshop.

As we already mentioned, a large number of similar artefacts were identified in the Cuman area situated on the Great Hungarian Plain between the Tisza and Danube rivers. Although the Cuman communities were already Christians, they kept a number of pagan burial rituals and they placed a larger number of objects in the graves of their dead people. Among the objects the diadem discs can be also found. The presence of discs in medieval rural or market town cemeteries and in Cuman cemeteries provides a clue regarding the social status of the individuals in whose grave discs or diadems were discovered. These were produced in a large number in workshops situated somewhere in central Hungary and they could be bought

⁶ Boldizsár *et al.* 2007, 27, 73, 75.

⁷ Marosi 1987, 135.

⁸ Boldizsár *et al.* 2007, 9, 69.

⁹ Marosi 1987, 126.

¹⁰ Hatházy 2004, 314.

¹¹ Ruttkay 2005, 31–57.

at larger fairs or annual fairs probably all over the kingdom. The objects were part of the 14th century gothic clothing fashion and in some cases these clothes were buried together with the bearer. The items therefore were not very expensive and even the rural elite could afford to buy them. In conclusion the ten years old girl in M52 could be from a family that was part of the local elite and they could afford not only the purchase of the diadem but also the burial of their daughter in a Franciscan cemetery. The family could be also among the possible donors of the Târgu Mureş friary.

The results of the C28

The C28 brought other significant results besides the M52. The anthropological analysis of the graves M39 and M42 revealed that the skeletons had a Germanic character. Of course in the 14th century the ethnic character of the graves is not relevant anymore. It is generally accepted that until the 14th century the different ethnic groups colonized in Transylvania were here for already three or four generations, therefore even if they show a certain anthropological features characteristic for an ethnic group these individuals lived in a Hungarian market town and in a Hungarian region. It is possible that the friars discovered in the Franciscan cemetery were of German origins but we do not know their cultural background.

It is important the chronological definition of the archaeological complex. In the case of C28 we could establish a relative and an absolute chronology, as well. The relative chronology was offered by the position of the well versus the cemetery. We can confirm without risk that when the well was built the area was no longer used for burials. Therefore when the well was built around the second half of the 15th century the area was no longer used as cemetery for a few decades. This is also proved by the fact that the well pit destroyed a number of graves (Pl. 1).

The absolute chronology was offered by the two coins (Fig. 2), one identified in the grave M39 and one found without a context. The Charles Robert coin found in the grave M39 gives us an important chronological horizon. The coin based on its catalogue identification¹² was minted in 1327. It is a simple silver denarius and its presence in the grave tells us that the person could not be buried before 1327. Generally a similar silver denarius was not used longer than one or two decades. Of course there is no guarantee that the coin was kept for longer and it was used at the burial. However the presence of the coin let us think that the M39 was buried sometimes between 1330 and 1350.

The graveyard we have found in the vicinity of the well functioned at least from the 1330's until the late 14th or early 15th century. An excellent clue for the *post quem* functioning is the Louis the Great coin (1342–1382) from the 1370's. Even if the coin was not found in a grave still helps to establish a chronological frame for the graves found in C28 and also for the diadem found in the M52. Based on the analogies and on the relative and absolute chronology the girl with diadem could have been buried in the second half of the 14th century around 1370–1400. This chronology is strengthened by the position of the M52 that seems to be among the latest burials in this cemetery part (Fig. 4), since the grave pit disturbed other graves (M47 and M53), while this grave remained free of later intervention. It seems that this was one of the last burials in this part of the graveyard, since there are no other burials that would disturb the graves.

¹² Unger 1997.

The C28 grave's great importance consists in its framing, since we have found the first burial horizon of the friary's cemetery, friary founded around the 1320's. The further extension of the cemeteries excavation could offer new data regarding the market town's early urbanization process, as well.

APPENDIX 1.

Morpho-taxonomical Analysis of Human Remains from the Franciscan Friary from Târgu Mureş – Section C28/2008

In the anthropological study, the age-at-death estimation was based on three criteria: long bone length and skeletal maturity, degenerative changes in the skeleton, and dental wear. The different age groups generally used and the appropriate methods for each age interval are: Infant or *Infans* I–II: dental development skeletal maturity and long bone dimensions,¹³ Juvenile or *Iuvenis*: skeletal maturity.¹⁴ In Adults (*Adultus* and *Senilis*) the method of G. Acsádi and J. Nemeskéri¹⁵ is employed which includes Todd's 1920 method to age the pubic symphysis and the method by R. S. Meindl and C. O. Lovejoy¹⁶ on cranial suture closure. For sex determination anthropologists follow the morphological method of Hungarian anthropologists K. Éry, A. Kralovánszky and J. Nemeskéri.¹⁷ For the calculation of stature several methods are used employing long bones in Romania according to Sjøvold,¹⁸ Pearson-Rösing¹⁹ and Zs. Bernert.²⁰ For dentition the method of Miles could be applied.²¹ The morphological and metric data were collected after R. Martin and L. Saller's method.²²

Grave M38

The skull is in good condition. Cranium: parietal, temporal bones with mastoid process, occipital, frontal and sphenoid bone, the ecto- and endocranial sutures are relatively open. Bones of the face: zygomatic and nasal bones, mandible. Situation of teeth: I2, C, PM1, PM2 (strongly affected by caries, only the root is preserved), M1 (1 – M2 and M3 fall out post mortem), I1, C, PM1, PM2, M3 (2 – M1, tooth lost in life and M2 has fallen after death), I1, I2, C, PM1, PM2, M1, M2, M3 (3 – M3 affected by caries, only the root is preserved), I1, I2, C, PM1, PM2, M1 (lost before the death), M2, M3 (4). Dental formula: 2123. Thorax: axis vertebra, 4 cervical vertebrae, 7 thoracic vertebrae and 5 lumbar vertebrae, sternum (without manubrium), diaphysis part of ribs. Upper limbs: fragments of the left and right shoulder-blades (scapula), left clavicle (l. of bone 137 mm), left humerus (l. of bone 290 mm, diam. of the head 42 mm), right humerus (l. of bone 290 mm, diam. of the head 42 mm), left radius (l. of bone 214 mm) and right radius (l. of bone 214 mm), left ulna (l. of bone 230 mm) and right ulna (l. of bone 230 mm). Bones of pelvis girdle: iliac bone (the right part), ischion bone (the right part). The lower part of the skeleton is missing. Characters of the skull show signs of a male. The situation of teeth, ecto- and endocranial sutures, epiphysis part of long bones show signs of an Adult person (50–55 years). Stature: after the methods

¹³ Stlouklal–Hanáková 1978.

¹⁴ İşcan *et al.* 1984, 1094–1104; İşcan *et al.* 1985, 853–863.

¹⁵ Acsádi–Nemeskéri 1970.

¹⁶ Meindl–Lovejoy 1985.

¹⁷ Éry *et al.* 1963.

¹⁸ Sjøvold 1990.

¹⁹ Rösing 1988.

²⁰ Bernert 2005; Bernert–Kustár 2005.

²¹ Miles 1963.

²² Martin–Saller 1958.

of Sjøvold and Pearson-Rösing, in Martin's classification (after clavicle, humerus, radius and ulna) is 155.86 cm. Pathology: a bone destruction caused by Spondylithis on the lumbar vertebrae. Caries cavity could be observed on PM1 (1) and M3 (3). Epigenetic traits: can be observed a bony torus along the metopic suture.

Grave M39

The skull is preserved fragmentary. Cranium: parietal and temporal bones with mastoid process, occipital, frontal and sphenoid bone, the ecto- and endocranial sutures are relatively closed. On the frontal bone metopic suture can be observed. Bones of the face: zygomatic bones (the surface of the bone is rough), nazal bone, maxilla and mandible (the surface of the bone is rough). Situation of teeth: C, PM1, PM2, M3 (1), C, PM2, M1, M3 (2), I1, I2, C, PM1, PM2, M1 (affected by caries), M3 (3), I2, C, PM1, PM2, M1, M2, M3 (4). Dental formula: 2123. Thorax: atlas and axis vertebrae, 5 cervical vertebrae, 3 thoracic vertebrae, 5 lumbar vertebrae (the last lumbar vertebra is ossificated with the sacrum), fragments from the diaphysis part of ribs, sternum (body and manubrium). Upper limbs: fragments of the left and right shoulder-blades (scapula), left clavicle (l. of bone 155 mm) and right clavicle (l. of bone 155 mm), left humerus (l. of bone 348 mm, diam. of the head 47 mm), right humerus (l. of bone 348 mm, diam. of the head 49 mm), left radius (l. of bone 268 mm) and left ulna (l. of bone 289 mm), right radius (l. of bone 268 mm) and right ulna (l. of bone 289 mm). Skeleton of the hands: metacarpal, carpal bones and phalanges. Bones of pelvis girdle: iliac bones (crista iliaca is developed), ischion bones (incisura ischiatica maior in „U” shape), pubian bones, sacrum. Lower limbs: right femur (l. of bone 471 mm, diam. of the head 52 mm), left femur (l. of bone 471 mm, diam. of the head 51 mm), right tibia (l. of bone 388 mm), left tibia (l. of bone 388 mm), right fibula (without lower epiphysis). Skeleton of the feet: right and left calcaneus (l. of bone 85 mm), right and left talus, metatarsal and tarsal bones, phalanges. The characters of the skull, dimension of long bones, the shape of pubian bone and incisura ischiatica maior in „U” shape shows male character. The situation of teeth, the ecto- and endocranial sutures, epiphysis ends of long bones, the surface of the clavicle show marks of an adult person (45–50 years old). Stature: after the methods of Sjøvold and Pearson-Rösing, in Martin's classification (after the clavicle, humerus, ulna, radius, femur, tibia and calcaneus) is 176.84 cm. Pathology: could be observed caries cavity on M1 (3) and on the last lumbar vertebra appears Spondylitis tuberculosis. *Epigenetic traits*: can be observed a bony torus and metopic suture on the frontal bone.

Grave M42

The skull is missing. Thorax: axis vertebra, 4 cervical and 3 thoracic vertebrae, fragments from diaphysis part of ribs. Upper limbs: left shoulder-blade (scapula), left clavicle (l. of bone 150 mm) and right clavicle (l. of bone 150 mm), left humerus (without the proximal epiphysis), left radius (l. of bone 249 mm), left ulna (the lower part of the bone is missing), proximal epiphysis of the right ulna. Lower limbs: left (l. of bone 365 mm) and right fibula (l. of bone 365 mm). The dimension of long bones show characters of a male. The dimension of long bones show signs of an adult person (over 30 years old). Stature: after the methods of Sjøvold and Pearson-Rösing, in Martin's classification (after the clavicle, radius, fibula) is 168.82 cm.

Grave M52

The conservation of the skeleton is relatively good. Cranium: parietal bones (is deformed because of the soil characteristics and one could observe bronze marks on the bone), temporal bones without mastoid process, occipital and frontal bone (with bronze marks), the ecto- and endocranial sutures are open. Bones of the face: zygomatic bones (the left part is missing), nasal bone, maxilla, mandible (is preserved fragmentary). Situation of teeth: I1, I2, DC, DM1, DM2, M1 (1), I1, I2, DC, DM2, M1 (2), I1, I2, DM1, DM2, M1 (3), I1, I2, DM1, DM2, M1 (4). Dental formula: 21022 (2 Incisivus, 1 Caninus, 0 Premolar, 2 Deciduus Molar and 2 Molar teeth). Thorax: 3 cervical vertebrae, 2 fragments from diaphysis part of ribs. Upper limbs: fragments of the left and right shoulder-blades (scapula), left humerus (without the lower epiphysis, the cortical layer is 1-2mm), right humerus without epiphysis ends, fragments from diaphysis

part of the left and right ulna, one fragment from the diaphysis part of the right radius. Bones of pelvis girdle: small pieces from iliac bones (the synostosis of the bone is in the second phase), ischion bone, pubian bone and sacrum (on the sacrum an abnormal ossification could be observed). Lower limbs: left femur without lower epiphysis, right femur (l. of bone 290 mm, diam. of the had 30 mm). Skeleton of the feet: left talus, 2 metatarsal bones and 4 tarsal bones and phalanges. The shape of pubian bone (symphysis ossis pubis) and characters of the skull show signs of a female. The ecto- and endocranial sutures, dimensions of long bones, the eruption phases of teeth and the synostosis of ends show a young child, Infans II (9–10 years old). Stature: after the methods of Sjøvold and Pearson-Rösing, in Martin's classification (after the femur) is 124.45 cm. Pathology: on incisor teeth could be observed dental enamel hypoplasias (episodes of disease or poor nutrition).

Grave M55

The skull is missing. Upper limbs: left humerus (l. of bone 310 mm, diam. of the had 42 mm), left radius (the proximal epiphysis is missing) and ulna (l. of bone 247 mm). The dimension of long bones shows signs of a female. The dimension and epiphysis part of long bones show the age of an adult person (23–25 years old). Stature: after the methods of Sjøvold and Pearson-Rösing, in Martin's classification (after the humerus, radius and ulna) is 162.1 cm.

Grave M56

The skull is preserved fragmentary. Cranium: parietal, occipital and temporal bones (the mastoid process is preserved only on the right part), frontal bone. Bone of the face: fragments from the zygomatic bones, maxilla and mandible. Situation of teeth: DI2, DC, DM1, DM2 (1), DI1, DI2, DC, DM1, DM2 (2), DI1, DM1 (3), DC, DM1, DM2 (4). Dental formula: 2102. Sex determination in this case is impossible. According to the eruption phases of the teeth and the ecto- and endocranial sutures, the human remains belong to a young child, Infans I (2–3 years old).

* * *

During the anthropological examination in two cases could be observed the characteristics of the skull (in both situation the cranium is brachicran or hyperbrachicran). The signs of the skull show Alpinoid, Pamiroid and Cromagnoid B characters. People of the Late Medieval communities from Europe had shorter, wider and higher skulls,²³ without having the clear answer of the cause of brachycephalisation. The gradual modification of the cranium could be observed during three periods: 11th–12th centuries, 12th–14th centuries and 15th–16th centuries. Simultaneously with the skull modification the stature of medieval people become higher, without connections between the skull and stature modification. In the Hungarian Kingdom the stature become smaller gradually, caused by the bad nutrition.

The characteristics of height data calculated from measures of long bones were realized five times. The stature of population is medium–high (for female 158–162 cm, for male 168–176 cm high), although in comparison with Central European samples, the stature is medium. The dentition is in bad condition, Prognathia Alveolaris and caries cavity could be observed. The occlusion of the teeth is perfect.

Several pathological and epigenetic cases can be mentioned. Among the diseases of bones the spondylolith on thoracic vertebrae (graves M38 and M39), caries cavity (graves M38 and M39) and tuberculosis on lumbar vertebrae (grave M52) can be mentioned. Epigenetic traits were the bony torus along the midline (arrows) of several bones and metopic suture (graves M38 and M39). Regarding the family connections the same epigenetic traits could be observed on two skulls (graves M38 and M39). Probably they were two brothers or other close relatives.

²³ Éri *et al.* 2005, 125.

	Males	Females	Males	Females	Males	Females
	14 th -15 th centuries	14 th -15 th centuries	11 th -12 th centuries		14 th -16 th centuries	
	Târgu Mureş		Hungarian Kingdom			
Very small	-	-	-	-	-	-
Small	-	-	-	-	-	-
Small-medium	-	-	-	-	-	-
Medium	-	-	-	157.49 cm	-	158.3 cm
Medium-high	-	157.1 cm	168.00 cm	-	-	-
High	171.84 cm	-	-	-	172.8 cm	-
Very high	-	-	-	-	-	-

Fig. 6. Stature after Sjøvold in R. Martin's classification.

Martin no.	Hungary 29 samples		Hungary 12 samples		Székesfehérvár		Târgu Mureş Bolyai High school 2 samples		Târgu Mureş Franciscan Friary 2 samples	
	11 th -13 th c.		11 th -16 th c.		12 th -14 th c.		14 th -15 th c.		14 th -15 th c.	
Individual cranial measurements and indices (8:1)	Cases	Av.	Cases	Av.	Cases	Av.	Cases	Av.	Cases	Av.
	N	X	N	X	N	X	N	X	N	X
	990	76.3	373	79.0	79	80.0	2	85.32	2	85.71
Longitudinal measurements										
1	1020	184.8	408	181.2	95	182.4	2	179.5	2	173.5
5	733	101.9	260	101.4	50	101.7	2	106.5	2	100.0
40	594	97.1	216	95.3	24	96.3	2	-	2	-
Latitudinal measurements										
8	1027	140.4	434	143.1	90	146.2	2	152.5	2	148.5
45	672	132.8	216	133.3	26	134.3	2	130.0	2	135.5
51	808	40.6	312	40.3	55	42.6	2	38.0	2	41.0
Altitudinal measurements										
17	807	134.4	286	134.4	56	135.4	2	149	2	137.5
48	787	70.6	296	69.6	49	70.6	2	73.5	2	77
52	813	33.1	321	33.0	56	33.1	2	34.5	2	35.5
Stature	552	167.6	705	168.8	148	170.3	11	151.70	5	167.17

Fig. 7. Chronological changes of cranial form in samples from Hungary²⁴ and from Târgu Mureş.

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²⁴ Éry *et al.* 2005, 126.

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Plate 1. 1. The C28 from east, in the right upper corner was identified the well ring and besides the foundation pit of the well filled with yellowish clay; 2. The C28 from east with the second layer of burials. In the right upper corner the cleaned well; 3. The grave M52 identified south to the well; 4. The unearthed grave.



Plate 2. The restored bronze discs.

1, 4. The Angevin heraldic symbol; 2, 5-6. Representation of a running deer; 3. Solar symbol.



1



2



3

Plate 3. Skulls from the cemetery of the friary. 1. Gr. M38. Frontal and side face image; 2. Grave M39. Frontal and side face image; 3. Grave M52. Frontal and parietal bones with bronze marks.