



## LATE ROMAN *BULLAE* AND AMULET CAPSULES IN PANNONIA<sup>1</sup>

Magdolna Szilágyi

### Introduction

In Classical Latin sources the term *bulla* indicates any object of round or globular shape, from the knobs on a piece of furniture through the buttons of a belt to lockets worn around the neck.<sup>2</sup> On the etymology of *bullae* Isidore of Seville says: *Dictae autem ...bullae, quod sint similes rotunditate bullis, quae in aqua vento inflantur.*<sup>3</sup> Amulet capsules called *bullae* in Classical texts are therefore necessarily of globular shape. Because globular and tubular amulet capsules had similar functions and use, both are referred to as *bullae* in the archaeological literature. In the present paper I will discuss globular and tubular amulet capsules separately. I will apply the term *bulla* only to denote globular amulet capsules, while by the term amulet capsule I mean the tubular pieces.

In 1732 Francesco Ficoroni completed his dissertation entitled *La bolla d'oro de fanciulli nobili romani e quella de libertini*.<sup>4</sup> Based on written sources Ficoroni, and many philologists after him, defined the *bulla* as a gold pendant that Roman boys of noble birth wore on a necklace. This definition has become a *topos* by now which requires rectification at some points in the light of recent archaeological investigations. Hans Goette has recently investigated and reinterpreted

---

<sup>1</sup> This article is a shortened and revised version of my MA thesis, “The Meaning and Use of Bullae in Late Classical Pannonia in their Imperial Context,” (Central European University, 2004). The catalogue of *bullae* and amulet capsules from the thesis has been published elsewhere: Magdolna Szilágyi, “Késő császárkori bullák és amulettkapszulák az Aquincumi Múzeumban” (Bullae and tubular amulet capsules in the Aquincum Museum), *Budapest Régiségei* 38 (2004): 313–333.

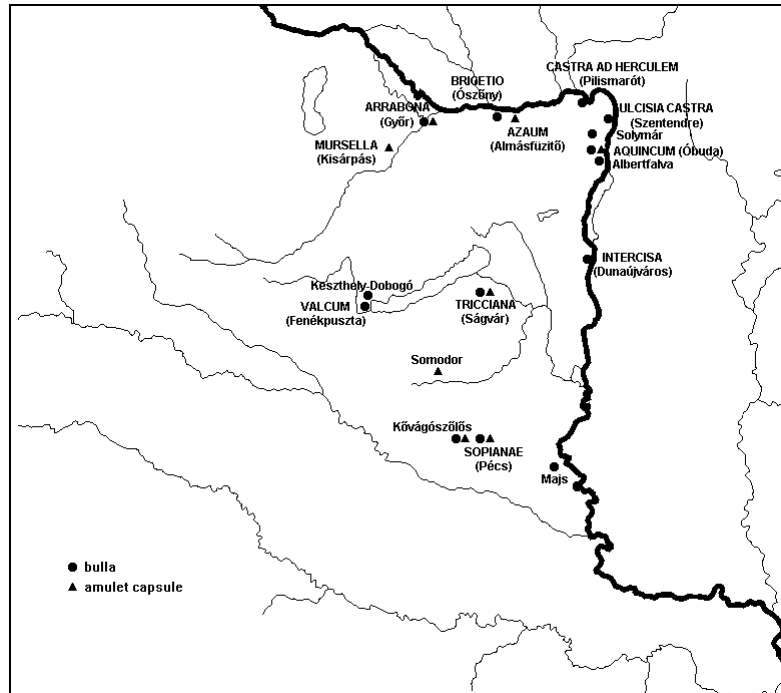
<sup>2</sup> *Thesaurus Linguae Latinae* Vol. 2, s.v. “bulla,” 2241–2242; Pauly-Wissowa, *Real-Encyclopädie der Classischen Altertumswissenschaft* (henceforth PWRE) Vol. 5, s.v. “bulla,” 1047–1051; Ch. Daremberg, and Edm. Saglio, *Dictionnaire des Antiquités Grecques et Romaines* (henceforth: Daremberg-Saglio) Vol. 1, s.v. “bulla,” 754–755.

<sup>3</sup> Sanctus Isidorus Hispalensis Episcopus, *Etymologiae* in *Patrologiae cursus completus*, series latina 82, ed. Jacques-Paul Migne, 592–610 (Paris: J.-P. Migne, 1844–; Turnhout: Brepols, 1990), 19.31.11.

<sup>4</sup> Francesco Ficoroni, *La bolla d'oro de fanciulli nobili romani e quella de libertini* (Rome: Stamperia di Antonio de' Rossi, 1732).

Magdolna Szilágyi

the use of *bullae* through a close analysis of more than one hundred statues and reliefs.<sup>5</sup> His survey was based on Western European collections; therefore, his achievements can only be adopted indirectly for Pannonia.



*Fig. 1. Sites in Transdanubia where Roman bullae and amulet capsules have been discovered*

In Transdanubia, which formed part of Roman Pannonia, seventeen sites have yielded *bullae* and amulet capsules so far (Fig. 1). In archaeological reports and monographs these *bullae* are often merely listed among the grave-goods of cemeteries and not discussed as a group of artifacts. In fact, Intercisa is the only Roman site where *bullae* have been catalogued and analysed in a systematic, scientific way.<sup>6</sup> The aim of this paper is to make a comprehensive analysis of

<sup>5</sup> Hans Rupprecht Goette, “Die Bulla” *Bonner Jahrbücher* 186 (1986) (henceforth: Goette, “Die Bulla”): 133–164.

<sup>6</sup> Mária Alföldi, “Perlen–Ketten–Anhänger,” in *Intercisa (Dunapentele–Szárlinváros)*, Vol. 2. *Geschichte der Stadt in der Römerzeit*, ed. Mária Alföldi, László Barkóczi, Jenő Fitz, et. al. (Budapest: Akadémiai Kiadó, 1957) (henceforth: *Intercisa* Vol. 2), 440–455; G. Facsar, I. Skoflek, Á. Salamon, “Eine Kapsel Frucht (Antirrhnum) aus Einer Römischen Bulla und



## Late Roman *Bullae* and Amulet Capsules in Pannonia

eighty *bullae* and fifteen amulet capsules discovered in Transdanubia to cast light upon their Pannonian use and meaning in the context of the Roman Empire.

### The Analysis of *bullae* and Amulet Capsules

The use of *bullae* originated with the Etruscans.<sup>7</sup> *Bullae* discovered in Etruria were impressive pieces of jewellery made of gold, normally consisting of a round or heart-shaped capsule 4 to 6 cm in diameter and a loop decorated with three emphasized longitudinal ribs. The capsules were often adorned with hammered-out motifs representing mythological scenes,<sup>8</sup> portraits,<sup>9</sup> or palm-trees and leaves.<sup>10</sup> Statues, bas reliefs, and other pictorial representations demonstrate that the Etruscans often wore three or more *bullae* strung on a necklace or a bracelet, sometimes together with other pendants. In the Republican and early Imperial periods the *bullae* of the Romans were also large round capsules like those of the Etruscans. However, they were normally plain and decoration was restricted to the loop. From the second century AD onwards even the loops tended to be undecorated.<sup>11</sup>

---

Bullen aus Bestattungen von Intercisa,” *Mitteilungen des Archäologischen Instituts der Ungarischen der Akademie Wissenschaften* 7 (1977): 93–108 (henceforth: Facsar–Skoflek–Salamon, “Eine Kapsel Frucht aus einer Römischen Bulla”).

<sup>7</sup> “...senex cum toga praetexta bullaque aurea; quo cultu reges soliti sunt esse E[trus]corum...” Paulus Diaconus, *Excerpta ex Libris Pompeii Festi de Significatione Verborum*, ed. Wallace M. Lindsay (Leipzig: Teubner, 1913) (henceforth: Paulus Diaconus, *Excerpta ex Libris Pompeii Festi*), 323; “...Etruscum puero si contigit aurum...” Juvenalis, *Satirae*, Loeb Classical Library Vol. 91 (Cambridge: Harvard University Press, 1996) (henceforth: Juvenalis, *Satirae*), 5.164.

<sup>8</sup> One of the magnificent Etruscan *bullae* is the one decorated with the mythological scene of Daïdalos and Ikaros (in the Walters Art Gallery, Baltimore), see George M. A. Hanfmann, “Daïdalos in Etruria,” *American Journal of Archaeology and of the History of Fine Arts* 39. No. 2 (1935): 189–194; Eva Fiesel, “The Inscription on the Etruscan bulla,” *American Journal of Archaeology and of the History of Fine Arts* 39, no. 2 (1935): 195–197; another example of a *bullae* decorated with a mythological scene is the item that bears the scene of Perseus slaying the Medusa (in the Museo Nazionale, Ancona), see Carlo Carducci, *Gold and Silver Treasures of Ancient Italy* (Greenwich, Connecticut: New York Graphic Society, 1963), 18.

<sup>9</sup> On *bullae* with the portraits of women see Carlo Carducci, *Gold and Silver Treasures of Ancient Italy*, 20–21, Fig. 20b, 21a.

<sup>10</sup> Goette, “Die Bulla,” 141.

<sup>11</sup> Goette, “Die Bulla,” 143.

Magdolna Szilágyi

The earliest *bullae* in Pannonia can be dated to the second century AD.<sup>12</sup> Compared to Western examples, *bullae* from Pannonia are small items with capsules 1.4 to 2.1 cm in diameter. They were normally made of one sheet of metal folded in two after embossing. The obverse of the *bulla* was usually made more bulging than the reverse. The rims of the two convex plates were either soldered or triangular pieces were cut out of the edge of the front plate and the little teeth were bent back to hold the capsule together (Fig. 2). The edges of the capsules were made smooth, finely scalloped, or roughly jagged; however, because of corrosion this cannot always be seen. The loops of *bullae* also tend to be corroded or broken, still, it appears that wide (0.9–1 cm) and short (0.3–0.4 cm) loops were the most common.



Fig. 2. Gold bulla (AQM 51363)

In Pannonia, *bullae* were rarely made of precious metals: out of seventy-five items only four are made of gold and three of silver (Table 1). Gold or silver *bullae* were normally decorated (Figs. 2–3).<sup>13</sup> In Pannonia the overwhelming majority of *bullae*, sixty-eight items out of seventy-five, were made of bronze.

<sup>12</sup> At Aquincum, three second-century *bullae* have been discovered (AQM 30236, 84.4.312/A, 88.4.32). *Bullae* dated to the late second or early third century are known from Brigetio (Kállay coll. K519 C, K 333a), Majs (grave 25), and Solymár (HNM 125.7).

<sup>13</sup> The gold *bullae* from Aquincum (AQM 51363, 51472) and Kő (JPM 26.14.1941) have loops adorned with longitudinal ribs. In the case of one *bulla* from Aquincum (AQM 51472) even the capsule was decorated with radiating ribs (Fig. 3). The capsule of the silver *bulla* from grave 141 at Tricciana shows an engraved star-like motif.



Late Roman *Bullae* and Amulet Capsules in Pannonia

The loops were occasionally decorated with longitudinal ribs,<sup>14</sup> but in most cases bronze *bullae* lacked all decoration. Some of the bronze *bullae* have a brown patina, while others are preserved with a lustrous sage or dark green colour as a result of burial. Some ancient bronzes closely resembled the colour and sheen of gold when they were new and well-polished. However, it is impossible to tell now whether the bronze ornaments were always brightly polished to preserve their lustre and resemblance to gold or were allowed to develop a brown patina.<sup>15</sup>

Table 1. Material of bullae

Material	No. of pieces	Site (collection, inventory number <sup>16</sup> )
Gold	4	Aquincum, Bécsi Rd 166 (AQM 51363), Aquincum, Bécsi Rd 102 (AQM 51472); Brigetio (Basch collection); Kő (JPM 26.14.1941)
Silver	3	Intercisa (grave XXIV/18); Majs (grave 25); Tricciana (grave 141)
Bronze	68	Albertfalva, Hunyadi J. St 18, 2/B (AQM 84.4.312/A), Aquincum (AQM 30236, 37527, 50779, 51026, 51043, 54211), Aquincum, Gas Factory (AQM 54116), Aquincum, Bécsi Rd 514/a (AQM 61.1.13), Aquincum, Bogdáni Rd (AQM 82.9.10, 82.9.200, 82.9.215), Aquincum, Csikós St (AQM 82.10.29), Aquincum, Bécsi Rd 269 (AQM 87.2.17, 87.2.44), Aquincum, Bécsi Rd – Perényi St (AQM 88.4.32, 88.4.57, 88.4.137), Aquincum, Vályog St (grave 73, grave 41), Aquincum, Pók St (grave 8); Arrabona, Gráb gyár (XJM 53.197.9), Arrabona, Kálvária St (XJM 53.156.80); Brigetio, (Kállay coll. K 519 C, K 333a); Castra ad Herculem (HNM 8/1937–47); Intercisa (HNM 85/1906–410, 14/1907–72, 14/1907–99, 46/1907–37, 46/1907–67, 8/1908–30, 8/1908–47, 28/1908–391, 28/1908–392, 28/1908–393, 90/1908–150, 105/1910–12, 193/1910–20, 194/1910–47, 194/1910–51, 75/1911–42, 75/1911–234, 75/1911–?, 100/1912–?, 1913–?, 97/1913–181, 97/1913–182, 125/1922–34, 125/1922–35, 125/1922–36, 3/1950–129; KSM 2459, 2769, 5514, 5515, 5560; IM 65.11.39.1, 65.11.44.1, 66.1.30.1, 70.1109.5; grave IV/8, grave XX/10); Keszthely-Dobogó (grave 47); Kővágószőlős (JPM R.84.16.8; R.83.103.3); Solymár (HNM 125.7); Tricciana (HNM 62.355.5)

<sup>14</sup> Intercisa (HNM 75/1911–42), Tricciana (HNM 62.355.5)

<sup>15</sup> Catherine Johns, *The Jewellery of Roman Britain. Celtic and Classical Traditions* (Ann Arbor: The University of Michigan Press, 1996) (henceforth: Johns, *The Jewellery of Roman Britain*), 14.

<sup>16</sup> If the inventory number is unknown or the object is not inventoried the grave number is given in parentheses.

Magdolna Szilágyi



Fig. 3. Gold bulla (AQM 51472)

In contrast to *bullae*, amulet capsules seem to originate from the East. The earliest parallels to Roman amulet capsules are known from Middle Kingdom Egypt. They look essentially the same as the Roman items but they were made to be suspended vertically rather than horizontally.<sup>17</sup> On mummy portraits from Late Roman Egypt, however, they are already depicted horizontally.<sup>18</sup> Similar capsules were made of gold or silver by Syrian and Punic goldsmiths.<sup>19</sup> In the Imperial Period the use of tubular amulet capsules spread throughout the Roman Empire. They even reached the Western provinces of the empire, as is evidenced by finds from Thetford,<sup>20</sup> York,<sup>21</sup> Kastell Vermania,<sup>22</sup> Gellep,<sup>23</sup> Autun,<sup>24</sup>

<sup>17</sup> Catherine Johns and Timothy Potter, *The Thetford Treasure* (London: Trustees of the British Museum, 1983)(henceforth: Johns–Potter, *The Thetford Treasure*), 99.

<sup>18</sup> Klaus Parlasca, *Mumienporträts und Verwandte Denkmäler* (Weisbaden: Franz Steiner Verlag, 1966), Plate 17, Fig. 1; Plate 50, Figs 1–2.

<sup>19</sup> Jacques Heurgon, *Le Trésor de Ténès* (Paris: Arts et Métiers, Graphiques, 1958) (henceforth: Heurgon, *Le Trésor de Ténès*), 57–58.

<sup>20</sup> Johns–Potter, *The Thetford Treasure*, 99; Johns, *The Jewellery of Roman Britain*, 104.

<sup>21</sup> A. MacGregor, *Finds from a Roman Sewer System and an Adjacent Building in Church Street* (York: York Archaeological Trustees, 1976), 10–11, Fig. 8, 72.

<sup>22</sup> Jochen Garbsch, “Spätromische Schatzfunde aus Kastell Vermania” *Germania* 49 (1971): 138, Taf. 2.

<sup>23</sup> Max Siebourg, “Ein gnostisches Goldamulet aus Gellep,” *Bonner Jahrbücher* 10 (1896): 125.

<sup>24</sup> n.a. *Autun Augustodunum Capitale des Éduens. Ouvrage Réalisé à partir de l'exposition qui s'est tenue à l'hôtel de ville d'Autun du 16 Mars au Octobre 1985* (Ville d'Autun: Musée Rolin, 1987), 195.



## Late Roman *Bullae* and Amulet Capsules in Pannonia

Vertault,<sup>25</sup> and Planche.<sup>26</sup> In the East the use of amulet capsules continued into the Middle Ages. In Byzantium they were worn by Christians even in the ninth century. In Persia similar tubular pendants were in continuous use until the twelfth and thirteenth centuries. In North Africa they are still worn.<sup>27</sup>

In Pannonia, tubular amulet capsules appeared in the third century. It may not be mere coincidence that it was in fact this period that the number of people moving to Pannonia from Asia Minor, Syria, and North Africa had risen significantly. The wearing of tubular capsules continued through the Roman period of Pannonia into the Middle and Late Avar periods. The Avars apparently obtained them via their connections with Byzantium, where they were used as containers of reliquaries.<sup>28</sup>

*Table 2. Material of amulet capsules*

Material	No. of pieces	Site (collection, inventory number)
Gold	6	Aquincum, Bécsi Rd 166 (AQM 51364), Aquincum, Bécsi Rd 89 (AQM 51462), Aquincum, Bécsi Rd 102 (AQM 51470), Arrabona (HNM 117/1885); Azaum; Sopianae (HNM 108/1912.18)
Silver	2	Arrabona, Kálvária St 6 (XJM 56.177.13), Mursella, Kőhid-dűlő (grave 121)
Bronze	6	Kővágószőlős (JPM R.84.16.5); Tricciana (HNM 9/1939/4, 62.357.5, 62.390/2); Somodor, Somodor-pusztá (HNM 108/1912.18); Sopianae (JPM 69.69.2–3)

Similarly to their Eastern parallels, amulet capsules in Roman Pannonia were often made of gold or silver (*Table 2*). They were made by folding sheet metal into a cylinder (*Fig. 4*), tetrahedron, hexahedron (*Fig. 5*), or octahedron. A piece of metal was soldered or carefully bent on one end of the tube. After the case was filled with some substance the other end of the case was closed with another piece of metal. Finally one, two or three tabs were soldered around (*Fig. 4*) or on the top of the case (*Fig. 5*). The tabs of gold or silver tubular

<sup>25</sup> Heurgon, *Le Trésor de Ténès*, 59.

<sup>26</sup> E. Poncet, “Le Trésor de Plance,” *Revue Numismatique* Ser. 3<sup>e</sup>, 7 (1889): 517–538.

<sup>27</sup> Johns–Potter, *The Thetford Treasure*, 99; Heurgon, *Le Trésor de Ténès*, 58, n.1.

<sup>28</sup> Adrienn Pásztor, “Adatok a közép-avarkor ékeszerviseletének kérdéséhez” (Data for the problem of wearing jewellery in the Mid-Avar period), *Archaeologiai Értesítő* 113 (1986): 129–133, Fig. 12–14; Tivadar Vida, “Heidnische und christliche Elemente der awarenzeitlichen Glaubenswelt. Amulette in der Awarenzeit,” *Zalai Múzeum* 11 (2002): 183, Taf. 9.

Magdolna Szilágyi

amulet capsules were often decorated with ribs, and they were also sometimes adorned with granulation.<sup>29</sup>

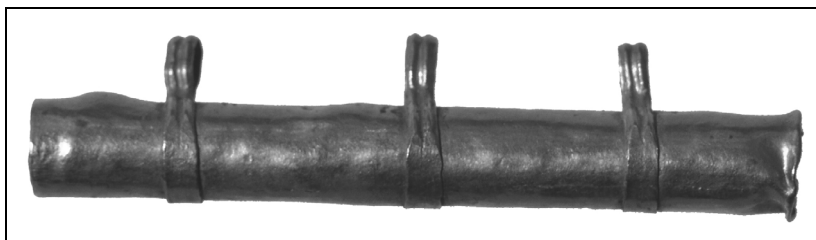


Fig. 4. Cylindrical gold amulet capsule (AQM 51462)



Fig. 5. Hexahedron shaped gold amulet capsule (AQM 51470)<sup>30</sup>

## Contents

Classical sources attest that Romans often wore prophylactic charms (*praebia, remedia*)<sup>31</sup> to cure or prevent illness or to keep away misfortune and the evil eye.<sup>32</sup> Amulets that could not be worn as jewellery, such as parts of plants or animals, were often put into a pouch or a capsule (*bullā, capsella, lupinum*), which they wore around the neck. Marcellus Empiricus, for instance, instructs that the eyes

<sup>29</sup> Arrabona (HNM 117/1885); Sopianae (HNM 108/1912.18)

<sup>30</sup> The photos (Figs. 2–5) were made by Péter Komjáthy, Aquincum Museum, 2004.

<sup>31</sup> “...praebia a praebendo, ut si(n)t tutus, quod sint remedia a collo pueris...” M. Terentius Varro, *De Lingua Latina*, ed. Carolus Odofredus Muellerus (Leipzig: Libraria Weidmanniana, 1833), 7.107; “Praebia remedia dicuntur curan(di) mali remedia videlicet quae curationi(s) causa praebeantur,” Paulus Diaconus, *Excerpta ex Libris Pompeii Festi*, 235; “praedia...Verrius vocari ait ea remedia,” Paulus Diaconus, *Excerpta ex Libris Pompeii Festi*, 238.

<sup>32</sup> N.G.L. Hammond and Howard Hayes Scullard, *The Oxford Classical Dictionary* (Oxford: Clarendon Press, 1970), s.v. “amulets,” 56.



Late Roman *Bullae* and Amulet Capsules in Pannonia

of a green lizard must be removed, enclosed in a gold box (*lupinum*) or a *bullae*, and hung around the neck if one has inflamed eyes.<sup>33</sup> As a remedy for goitre he suggests that the heart of a lizard should be put in a silver box and worn around the neck.<sup>34</sup>

Table 3. The contents of bullae

Contents	No. of pieces	Site (collection/inventory number)
Parts of plants	8	Aquincum, Bécsi Rd 269 (AQM 87.2.17), Aquincum, BécsiRd-Perényi St (AQM 88.4.137), Aquincum, Vályog St 6 (grave 73); Intercisa (HNM 194/1910–47; grave XXIV/18; KSM 5514, 5515); Keszthely-Dobogó (grave 47)
Cloth	7	Intercisa (grave IV/8; HNM 8/1908–30, 8/1908–47, 28/1908–392, 28/1908–393; IM 65.11.44.1); Sopianae (JPM R.69.5.2)
Both cloth and plant	2	Intercisa (HNM 85/1906–410; KSM 2459)
Silver plate	1	Aquincum, Aranyhegy-árok (AQM 30236)
Coin	1	Aquincum, Aranyhegy-árok (AQM 30236)
Sand	1	Aquincum, Bécsi Rd 102 (AQM 51472)

In Pannonia the remains of textiles and/or parts of plants have been found in the capsules of *bullae* (Table 3). Botanical investigations carried out on the contents of *bullae* from Intercisa showed that some *bullae* held the seed pod of snapdragon (*Antirrhinum majus*).<sup>35</sup> Other *bullae* from Intercisa contained parts of plants wrapped in cloth. At Aquincum a raisin<sup>36</sup> and rose thorns<sup>37</sup> were found in

<sup>33</sup> “Lacerti uiridis, quem ceperis die Iouis lunae uetere mense Septembri aut etiam quocumque alio, oculos erues acu cuprea et intra bullam uel lupinum aureum claudes colloque suspendes; quod remedium quamdiu tecum habueris, oculos non dolebis. Lacertum sane eodem loco, in quo ceperis, dimittes.” Ulpianus Marcellus, *De Medicamentis* in *Corpus Medicorum Latinorum*, ed. Max Niedermann and Edouard Liechtenhan, Vol. 1, Caput VIII, 110–169 (Berlin: Akademie-Verlag, 1968) (henceforth: Marcellus, *De Medicamentis*), 8.50.

<sup>34</sup> “Contra omnes strumas et feminis et maribus utilissimum est, si cor lacertae uiridis lupino argenteo clausum in collo suspensum semper habeant.” Marcellus, *De Medicamentis*, 15.52.

<sup>35</sup> Facsar–Skoflek–Salamon, “Eine Kapsel Frucht (Antirrhinum) aus Einer Römischen Bulla,” 97.

<sup>36</sup> The *bullae* (AQM 88.4.137) came from grave 13, graveyard V, of the cemetery of the Military Town at Bécsi Road–Perényi Street. Judit Topál, *Roman Cemeteries of Aquincum*,



Magdolna Szilágyi

*bullae*. At Keszthely-Dobogó a *bull*a contained coriander seeds (*Coriandrum sativum*) wrapped in leaves<sup>38</sup> and another *bull*a enclosed unidentified pieces of wood.<sup>39</sup> *Bullae* from Pannonia not only contained organic substances. A gold *bull*a from Aquincum, for example, was filled with sand.<sup>40</sup> Another gold *bull*a from Aquincum contained a coin of Trajan and a folded silver plate with a Greek inscription.<sup>41</sup>

The shape of tubular capsules was well-suited to holding rolled up metal sheets, as is demonstrated by numerous items discovered throughout the Roman Empire. The sheets were made of gold or silver and bore Gnostic or magic formulae.<sup>42</sup> Written sources support the archaeological data: Marcellus, for instance, recommends gold or silver sheets (*laminae aureae, laminae argenteae*) for magic spells. He says that the engraved sheets have to be either hung on a cord themselves<sup>43</sup> or rolled up and put into a gold tube (*tubulus aureus*).<sup>44</sup> The

---

*Pannonia. The Western Cemetery. Bécsi Road*. Vol. 2 (Budapest: Aquincum Nostrum, 2003) (henceforth: Topál, *The Western Cemetery. Bécsi Road* Vol. 2), 15.

<sup>37</sup> Grave 73, cemetery of the Military Town, Vályog St 6.

<sup>38</sup> Károly Sági, “Die Spätromische Bevölkerung der Umgebung von Keszthely,” *Acta Archaeologica Academiae Scientiarum Hungaricae* 12 (1960): 216–218.

<sup>39</sup> Károly Sági, “Temetők” (Cemeteries) in *Intercisa* Vol. 1, ed. Károly Sági et al. (Budapest: Akadémiai Kiadó, 1954), 67.

<sup>40</sup> The *bull*a (AQM 51472) comes from grave 27, Western Cemetery of the Military Town, Aquincum, Bécsi Road 102. Bálint Kuzsinszky, “Aquincumi sírlelet” (Gravegoods from Aquincum), *Budapest Régiségei* 10 (1923): 63; Topál, *The Western Cemetery. Bécsi Road* Vol. 2, 59.

<sup>41</sup> The *bull*a (AQM 30236) was found in the Aranyhegy-árok cemetery. János Szilágyi, “Jelentés a Fővárosi Ókortörténeti (Aquincumi) Múzeum kutatásairól és szerzeményeiről az 1945–1948. évek folyamán” (Report on the excavations and acquisitions of the Budapest Museum of Antiquity [Aquincum] 1945–48), *Budapest Régiségei* 15 (1950): 66; Irén Bilkei, “Griechischen Inschriften des römischen Ungarns,” *Alba Regia* 17 (1979): 29–30; Paula Zsidi, *Istenek, katonák, polgárok. Kiállítás az aquincumi múzeum megnyitásának 100. évfordulója alkalmából*, (Gods, soldiers, citizens. Exhibition for the one hundred<sup>th</sup> anniversary of the opening of the Aquincum Museum)(Budapest: Pro Aquinco, 1995), 54.

<sup>42</sup> Max Siebourg, “Ein gnostisches Goldamulet aus Gellep,” *Bonner Jahrbücher* 10 (1896): 123–153.

<sup>43</sup> “Remedium physicum magnum aduersum dolorem stomachi. In lamina argentea scribes et dices: ‘Arimatho, aufer dolores stomachi illi, quem peperit illa.’ Eandem laminam lana ouis uiuae inuolutam collo de licio suspendes et id agens dices: ‘Aufer mihi uel illi stomachi dolorem, Arimatho.’” Marcellus, *De Medicamentis*, 20.66.



## Late Roman *Bullae* and Amulet Capsules in Pannonia

material of the plates and capsules could enhance the efficacy of the formulae by having magic features themselves. Gold, for instance, as Pliny notes, was “used as an amulet for wounded people and for infants to render less harmful poisonous charms” directed against them.<sup>45</sup>

In Pannonia only one tubular capsule contained a magic plate: a bronze cylinder from Tricciana held a rolled up silver sheet on which Latin and Greek legends and magic symbols were engraved.<sup>46</sup> A tubular capsule from Arrabona had a votive legend engraved on the capsule itself.<sup>47</sup> In addition, an amulet capsule from Sopianae contained some remains of cloth,<sup>48</sup> and another item from Aquincum was filled with white paste.<sup>49</sup>

### The Symbolism of Age and Gender

The Classical sources attest that freeborn Roman infants received their *bullae* as part of the rites of incorporation that were held around their birth. Infants were

---

<sup>44</sup> “Ad coli dolorem scribere debes in lamina aurea de grafio aureo infra scriptos characteres luna prima uigesima et laminam ipsam mittere intra tubulum aureum.” Marcellus, *De Medicamentis*, 28.26.

<sup>45</sup> “Aurum pluribus modis pollet in remediis volneratisque et infantibus adplicatur, ut minus noceant quae inferantur veneficia.” C. Plinius Secundus, *Naturalis Historia*, Loeb Classical Library Vol. 394, tr. H. Rackham, (Cambridge, Massachusetts: Harvard University Press, 1972)(henceforth: Plinius, *Naturalis Historia*), 33.25.

<sup>46</sup> Alice Burger, “The Late Roman Cemetery at Ságvár,” *Acta Archaeologica Academiae Ascientiarum Hungaricae* 18 (1966): 110; Mária Krisztina Kubinyi, “A ságvári római sírmező egyik sírjában talált varázstábla” (The magic plate found in the Roman cemetery of Ságvár), *Archaeologiai Értesítő* 7 (1946–48): 276–277; Irén Bilkei, “Griechischen Inschriften des römischen Ungarns,” *Alba Regia* 17 (1979): 33.

<sup>47</sup> (HNM 117/1885) Endre Tóth, “Römische Gold- und Silbergegenstände mit Inschriften im Ungarischen Nationalmuseum; Goldringe,” *Folia Archaeologica* 30 (1979): 168–173; Endre Tóth, “Silvanus Viator,” *Alba Regia* 13 (1980): 93.

<sup>48</sup> The amulet capsule (JPM 69.69.2–3) was found in grave L/91. Ferenc Füle, *Sopiana. The History of Pécs during the Roman Era, and the Problem of the Continuity of the Late Roman Population* (Budapest: Akadémiai Kiadó, 1984), 125–126.

<sup>49</sup> The amulet capsule (AQM 51462) was found in grave 9, Western cemetery of the Military Town, Bécsi Rd 89. Topál, *The Western Cemetery. Bécsi Road* Vol. 2, 56. The filling substance was apparently applied for utilitarian reasons, that is it helped to preserve the form of the capsule. In addition, it may have had a magical role such as the sulphur found in one of the amulet capsules of the Thetford treasure or the calcite (bone powder?) found in the smaller capsule of the Ténès Treasure. Johns-Potter, *The Thetford Treasure*, 25–26; Heurgon, *Le Trésor de Ténès*, 58, n.1.



Magdolna Szilágyi

given their *bulla* on their birthday<sup>50</sup> or one week later (*dies lustricus*, *dies nominum*, or *nominalia*), when they received their *praenomen* in a solemn ceremony.<sup>51</sup> On this day the child was ritually purified and the father gave a *bulla* to his son,<sup>52</sup> and perhaps also his daughter,<sup>53</sup> to bring good fortune.<sup>54</sup> When a youth reached an age between 14 and 16 he underwent a rite of passage which involved dedicating his *bulla* to the household gods (*Lares, Penates*)<sup>55</sup> and exchanging his *toga*

---

<sup>50</sup> “Et bulla aurea est, pater quam dedit mi natali die...” Plautus, *Rudens*, Loeb Classical Library Vol. 260, (Cambridge: Harvard University Press, 1996) (henceforth: Plautus, *Rudens*), 1171.

<sup>51</sup> The *dies nominum* was held on the eighth day after birth in the case of girls, and on the ninth day in the case of boys. H. W. Johnston, *The Private Life of the Romans*, (Scott: Foresman, 1932), paragraphs 95 and 97.

<sup>52</sup> Classical authors most often attribute *bullae* to boys of noble or free birth. “Etruscum puero si contigit aurum,” Iuvenalis, *Satirae*, 5.164; “ingenuis pueris attributum... bulla,” A. Theodosius Macrobius, *Saturnalia*, ed. Iacobus Willis, Vol. 1 (Leipzig: Teubner, 1963) (henceforth: Macrobius, *Saturnalia*), 1.6.17; “bullae ornamenta regalium puerorum,” *Excerpta ex Libro Glossarum*, ed. Georgius Goetz, (Leipzig: Teubner, 1894) (henceforth: *Excerpta ex Libro Glossarum*), 5.173.1; “bullae... nobilium puerorum,” *Grammatici Latini ex Recensione Henrici Keilii. Supplementum Continens Anecdota Helvetica*, ed. Hermanus Hagen, (Leipzig: Teubner, 1870) (henceforth: *Grammaticorum Supplementum*), 239; “bulla... puerorum nobilium,” Macrobius, *Saturnalia*, 1.6.10; “ingenuorum puerorum... bulla aurea,” Macrobius, *Saturnalia*, 1.6.11; “bulla aurea insigne erat puerorum praetextatorum,” Paulus Diaconus, *Excerpta ex Libris Pompeii Festi*, 36.

<sup>53</sup> Compared to boys, girls are infrequently reported in sources to have worn a *bulla*. In the *Rudens* a young girl called Palaestra was recognized by her father by after her *crepundia*, which contained a *bulla*. Plautus, *Rudens*, 1171.

<sup>54</sup> “...ornamentum pueritiae pater dederat, indicium atque insigne fortunae...” M. Tullius Cicero, *In Verrem, Actio II* Loeb Classical Library Vol. 7, ed. T. E. Page (Cambridge: Harvard University Press, 1966) (henceforth: Cicero, *In Verrem II*), 1.152

<sup>55</sup> “mox ubi bulla rudi dimissaest aurea collo, matris et ante deos libera sumpta toga,” Sextus Propertius, *Elegiae*, ed. Paulus Fedeli (Stuttgart: Teubner, 1984) (henceforth: Propertius, *Elegiae*), 4.130; “cum primum pauido custos mihi purpura cessit bullaque subcinctis Laribus donata pependit,” A. Persius Flaccus, *Saturae*, ed. W. V. Clausen (Oxford: Oxford University Press, 1992) (henceforth: Persius, *Saturae*), 5.30–31; “translatione sumpta a generosis pueris, qui bullam auream egressi pueritiae annos apud lares solent suspendere,” Pomponius Porphyrius, *Commentarii in Horatium Flaccum*, ed. Guilelmus Meyer, (Leipzig: Teubner, 1874) (henceforth: Porphyrius, *Commentarii in Horatium*), 1.5.65; “Solebant pueri, postquam pueritiam excedebant, dis Laribus bullas suas consecrare, similiter et puellae pupas... Bullas nobiles senatores gestabant, quas adulti diis Penatibus consecrabant...” *Sermonum Liber in Pseudacronis Scholia in Hortatum Vetustiora*, Vol. 2, ed. Otto Keller (Leipzig: Teubner, 1904) (henceforth: *Pseudacronis Scholia*), 1.5.65–66.



Late Roman *Bullae* and Amulet Capsules in Pannonia

*praetexta*<sup>56</sup> for the *toga virilis* that he would wear for rest of his life. The ceremony, which could reach a lavish scale in the case of the elite, was conducted both privately in the household and publicly in the Forum.<sup>57</sup>

*Bullae* and amulet capsules from Pannonia have come to light almost exclusively as grave-goods. Based on the data from the thirty-two graves that I have information about, I can infer that *bullae* and amulet capsules were mainly worn by children and women in Roman Pannonia. Out of thirty-two individuals twenty-two were children, eight were adult women, and only two were adult men (*Table 4*).

*Table 4. Age- and gender-distribution of individuals buried with a bulla or amulet capsule*

Age groups <sup>58</sup>	Male	Female	Unidentified sex	Total
<i>Neonatus</i> (0–1 year)	—	—	—	—
<i>Infans 1</i> (1–4 years)	2	—	1	3
<i>Infans 2</i> (5–12 years)	—	1	2	3
<i>Iuvenis</i> (12–20 years)	—	—	—	—
<i>Adultus</i> (20–40 years)	—	2	—	2
<i>Maturus</i> (40–60 years)	1	—	—	1
<i>Senilis</i> (60–x years)	—	—	—	—
Child of unidentified age	1	5	10	16
Adult of unidentified age	1	6	—	7
Total	5	14	13	32

<sup>56</sup> The *toga praetexta* together with the *bulla* symbolised the pre-adolescence of freeborn Roman children. Cicero, *In Verrem* II, 1.152; “liberorum bullas atque praetextas,” G. Suetonius Tranquillus, *Divus Iulius* Loeb Classical Library Vol. 31, (Cambridge: Harvard University Press, 1968) (henceforth: Suetonius, *Divus Iulius*), 84; “praetexta bullaque... puerorum ingenuorum insignia esse,” S. Aurelius Victor, *Liber de Viris Illustribus Urbis Romae*, ed. F. R. Pichlmayr (Leipzig: Teubner, 1961) (henceforth: Aurelius Victor, *Liber de Viris Illustribus*), 6.9; “praetexta et bulla... puerorum nobilium,” Macrobius, *Saturnalia*, 1.6.10; “ingenuorum puerorum... bulla aurea cum toga cui purpura praetextitu,” Macrobius, *Saturnalia*, 1.6.11; “bulla aurea insigne erat puerorum praetextatorum,” Paulus Diaconus, *Excerpta ex Libris Pompeii Festi*, 36.

<sup>57</sup> “Qui virilem togam sumunt vel nuptias faciunt vel ineunt magistratum vel opus publicum dedicant, solent totam bulen atque etiam e plebe non exiguum numerum vocare binosque denarios vel singulos dare,” C. Plinius Caecilius Secundus, *Epistulae*, ed. R. C. Kukula, (Leipzig: Teubner, 1912), 10.116.

<sup>58</sup> The age groups given in the table are the ones generally used in Hungarian anthropology, e.g. Gy. Acsády, and J. Nemeskéri, *History of Human Life Span and Mortality* (Budapest: Akadémiai Kiadó, 1970), 223.



Magdolna Szilágyi

The custom of children wearing *bullae* is thoroughly supported by ancient authors. What seems to contradict the general consensus of opinion among Classical philologists is that adult women had *bullae*. Ancient sources do not give any information about when girls parted with their *bullae*. However, because marriage was a rite marking the end of girls' childhood and the *bullae* was one of the insignia of children philologists have inferred that Roman women did not wear their *bullae* after the day of their marriage,<sup>59</sup> that is, after about the age of 14.<sup>60</sup> Goette also concluded from the analysis of Western European monuments that Roman women did not have *bullae*.<sup>61</sup>

The number of adult women among people buried with *bullae* is so high in Pannonia that they cannot be regarded as mere exceptions, and it is not likely either that they were all unmarried. The fact that women in Pannonia had *bullae* or amulet capsules must be considered a provincial custom, which may be explained by the apotropaic nature of their contents. Epigraphical data indicate that in Pannonia the mortality ratio was particularly high among women<sup>62</sup> and children under the age of ten.<sup>63</sup> In addition, women and children were inferior to men owing to their physiques and their social, legal and economic status. It seems most plausible, therefore, that they were wearing the *bullae* or amulet capsule to shield themselves against illnesses and other harm that they were more subject to than men.

### The Symbolism of Social Status and Wealth

Written sources highlight how the use of the *bullae* spread in Roman society and what its meaning was at certain periods of Roman history. Until the end of the Republican period the gold *bullae* symbolised the social status of its wearer. In the beginning it was only the children of senators and patricians who had the

---

<sup>59</sup> PWRE, s.v. 'bullae,' 1048.

<sup>60</sup> Albert Granger Harkness, "Age at marriage and death in the Roman Empire," *Transactions of the American Philological Association*, 27 (1896): 35.

<sup>61</sup> Goette, "Die Bullae," 144.

<sup>62</sup> By the statistical analysis of approximately 11,000 epitaphs János Szilágyi computed that life expectancy in Pannonia was between 24.0 and 38.7 for men, and 21.2 and 34.4 years for women. The life span of women was shorter than that of men because of marriage and child birth at a young age that often resulted in death. See János Szilágyi, "Adatok az átlagos élettartam kérdéseihez Aquincumban és Pannonia más részeiben" (Data on the problems of average life spans in Aquincum and other parts of Pannonia), *Antik Tanulmányok* 6 (1959): 229, 241 (henceforth: Szilágyi, "Adatok")

<sup>63</sup> According to the calculations of János Szilágyi in Pannonia 17.8 per cent of children died before the age of ten. Szilágyi, "Adatok," 235–236.



## Late Roman *Bullae* and Amulet Capsules in Pannonia

privilege to have a gold *bullae*.<sup>64</sup> Later this right was extended to the equestrians.<sup>65</sup> Those who were not members of the *patriciatu*s or the *equites* could have a leather strap (*lorum*) instead of a *bullae*.<sup>66</sup> From the second century BC onwards the gold *bullae* became the badge of freeborn (*ingenuus*) children.<sup>67</sup> In the first century AD even freedmen (*libertini*) received the right to have it. The gold *bullae* thus had lost its value as a social marker by the Imperial period and its possession became only a question of finances. The sons of noblemen and affluent people in general wore gold *bullae*. Those who could not afford gold had their children's *bullae* made of other materials, such as bronze or leather, or simply made a knot (*nodus*) on a *lorum*.<sup>68</sup>

### Conclusion

In this study I have demonstrated the characteristics and use of *bullae* and amulet capsules in Late Roman Pannonia in context of the Roman Empire. The use of the *bullae* went through significant changes from the Republican period to Late Antiquity not only as regards its material and decoration, but also considering the symbolic values and associations it had. According to the testimony of ancient texts, in the early Republican period the gold *bullae* was among the insignia of the highest stratum of Roman society: senators, patricians, and equestrians. In this period the *bullae* normally had a wide decorated loop and

---

<sup>64</sup> “aurum argentum [aes] signatum omne senatores crastino die in publicum conferamus, ita ut anulos sibi quisque et coniugi et liberis, et filio bullam, et quibus uxor filiaeque sunt singulas uncias pondo auri relinquunt. argenti qui curuli sella sederunt equi ornamenta et [duas] libras pondo, ut salinum patellamque deorum causa habere possint,” Titus Livius, *Ab Urbe Condita*, ed. P. G. Walsh (Leipzig: Teubner, 1982), 26.36.5–7; “alii putant eundem Priscum... cultum quoque ingenuorum puerorum inter praecipua duxisse, instituisseque ut patricii bulla aurea cum toga cui purpura praetextitur uterentur, dumtaxat illi quorum patres curulem gesserant magistratum,” Macrobius, *Saturnalia*, 1.6.11; *Pseudacronis Scholia*, 1.5.65–66.

<sup>65</sup> “Sed a Prisco Tarquinio omnium primo filium, cum in praetexta annis occidisset hostem, bulla aurea donatum constat, unde mos bullae duravit, ut eorum, qui equo meruissent, filii insigne id haberent, ceteri lorum,” Plinius, *Naturalis Historia*, 33.10.

<sup>66</sup> Pliny, *Naturalis Historia*, 33.10.

<sup>67</sup> “neque te tam commovebat quod ille cum toga praetexta quam quod sine bulla venerat. Vestitus enim neminem commovebat is quem illi mos et ius ingenuitatis dabat,” Cicero, *In Caium Verrem* II, 1.152; Aurelius Victor, *Liber de Viris Illustribus*, 6.9; “ingenuorum puerorum... bulla aurea,” Macrobius, *Saturnalia*, 1.6.11.

<sup>68</sup> “Etruscum puero si contigit aurum vel nodus tantum et signum de paupere loro?” Juvenalis, *Satirae*, 1.165.



Magdolna Szilágyi

a large, plain capsule 4 to 6 cm in diameter. In the second century BC the right to wear a gold *bullā* was extended to freeborn (*ingenuus*) people. In parallel, the *bullā* lost its decoration although it preserved its former shape and size. By the time the Roman Empire annexed Pannonia in the first century AD the wearing of the gold *bullā* had been allowed to any free person. Consequently, the *bullā* had lost its social marking feature, and having a *bullā* made of gold became merely a sign of wealth. In Pannonia only a few gold *bullae* have been discovered so far. They are small items with wide decorated loops and plain capsules approximately 2 cm in diameter. Most of the *bullae* from Pannonia are small pieces made of bronze, normally lacking all decoration.

Tubular amulet capsules were used in Roman Pannonia from the third century AD onwards. In contrast with *bullae* they were often made of gold or silver and bore some kind of decoration, such as ribs or granulation. While *bullae* were characteristic Roman ornaments, tubular capsules seem to have been brought to Pannonia from Asia Minor, Syria, or North Africa by Eastern peoples. In spite of these differences *bullae* and amulet capsules had similar uses and meaning in Pannonia, as is evidenced by their contents and the circumstances of finds. *Bullae* often enclosed remains of plants, sometimes wrapped in cloth, which, according to ancient authors, were meant to cure their wearers or to prevent illnesses or misfortune. The contents of tubular capsules such as magic formulae, cloth or white paste apparently had similar apotropaic functions. Both *bullae* and amulet capsules could be worn together with other amulets such as beads of special materials or colours. In Pannonia, *bullae* and amulet capsules are normally discovered in the graves of children and adult women, who needed the supernatural protection of these amulets more than men because of their high mortality ratio, their frailty, and lower position in society. *Bullae* and amulet capsules in Pannonia therefore were neither markers of status nor symbols of childhood, but containers of prophylactic charms meant to protect their wearers from harm.

### Acknowledgements

My thanks go to the colleagues at the Aquincum Museum, Budapest; Hungarian National Museum, Budapest; Intercisa Museum, Dunaújváros; and Janus Pannonius Museum, Pécs for helping my work. My special thanks go to Paula Zsidi, Orsolya Madarassy and Orsolya Láng at the Aquincum Museum for giving me permission to use here the data of unpublished *bullae* excavated by them.



## Late Roman *Bullae* and Amulet Capsules in Pannonia

### Abbreviations

AQM	Aquincum Museum, Budapest
HNM	Hungarian National Museum, Budapest
IM	King Stephen Museum, Székesfehérvár
JPM	Intercisa Museum, Dunaújváros
KSM	Janus Pannonius Museum, Pécs
XJM	Xántus János Museum, Győr

### Appendix: List of sites

List of sites	Literature
Albertfalva, Hunyadi J. St.	Szirmai, Krisztina. "Small Bronze and Iron Finds from the Vicus of the Military Fort of Budapest-Albertfalva." <i>NAR</i> 18 (1995): Kat. 24; Zsidi, Paula. <i>Istenek, katonák, polgárok</i> . Budapest: Pro Aquinco, 1995, 71.
Aquincum (Óbuda), Aranyhegy-árok	Szilágyi, János. "Jelentés a Fővárosi Ókortörténeti (Aquincumi) Múzeum kutatásairól és szerzeményeiről az 1945–1948. évek folyamán" (Report on the excavations and acquisitions of the Budapest Museum of Antiquity [Aquincum]). <i>Budapest Régiségei</i> 15 (1950): 66; Bilkei, Irén. "Griechischen Inschriften des römischen Ungarns." <i>Alba Regia</i> 17 (1979): 29–30; Zsidi, Paula. <i>Istenek, katonák, polgárok</i> . Budapest: Pro Aquinco, 1995, 54.
Aquincum, Bécsi Rd. 89	Topál, Judit. <i>Roman Cemeteries of Aquincum, Pannonia. The Western Cemetery. Bécsi Road Vol. 1</i> . Budapest: Aquincum Nostrum, 2003, 56.
Aquincum, Bécsi Rd. 102	Kuzsinszky, Bálint. "Aquincumi sírlelet," <i>Budapest Régiségei</i> 10 (1923): 62–63; Kuzsinszky, Bálint. <i>Aquincum. Az ásatások és a múzeum ismeretése</i> . Budapest, 1933, 41; Topál, Judit. <i>Roman Cemeteries of Aquincum, Pannonia. The Western Cemetery. Bécsi Road. Vol. 2</i> . Budapest: Aquincum Nostrum, 2003, 59.
Aquincum, Bécsi Rd. 166	Szilágyi, János. "Jelentés a Fővárosi Ókortörténeti Múzeum kutatásairól és szerzeményeiről az 1945–48. évek folyamán." <i>Budapest Régiségei</i> 15 (1950): 308; Zsidi, Paula. <i>Istenek, katonák, polgárok</i> . Budapest: Pro Aquinco, 1995, 69–70.
Aquincum, Bécsi Rd. 269	Topál, Judit. <i>Roman Cemeteries of Aquincum, Pannonia. The Western Cemetery. Bécsi Road Vol. 1</i> . Budapest: Aquincum Nostrum, 2003, 70–72.



Magdolna Szilágyi

Aquincum, Bécsi Rd. 514/a	Parragi, Györgyi. "Újabb késő-római leletek a Bécsi úton." <i>Budapest Régiségei</i> 21 (1964): 215.
Aquincum, Bécsi Rd.-Perényi St.	Topál, Judit. <i>Roman Cemeteries of Aquincum, Pannonia. The Western Cemetery. Bécsi Road</i> . Vol. 2. Budapest: Aquincum Nostrum, 2003, 9, 15, 96–97.
Aquincum, Bogdáni Rd.	By courtesy of Paula Zsidi (unpublished).
Aquincum, Csikós St.	Polenz, Harmut, Helga Polenz. <i>Das römische Budapest</i> . Münster, 1986, Kat. 616.
Aquincum, Gázgyár	By courtesy of Aquincum Museum. Unpublished.
Aquincum, Pók St.	By courtesy of Orsolya Láng. Unpublished.
Aquincum, Vályog St.	By courtesy of Orsolya Madarassy. Unpublished.
Arrabona (Győr)	Tóth, Endre. "Römische Gold- und Silbergegenstände mit Inschriften im Ungarischen Nationalmuseum; Goldringe." <i>Folia Archaeologica</i> 30 (1979): 168–173; Tóth, Endre. "Silvanus Viator." <i>Alba Regia</i> 13 (1980): 93.
Arrabona, Gráb Gyár	Szónyi, Eszter. "Arrabona késő római temető, II, Nádorváros." <i>Arrabona</i> 22–23 (1986): 8–9.
Arrabona, Kálvária St.	Szónyi, Eszter. "A győri Kálvária utcai temető csontvázas sírjai." <i>Arrabona</i> 16 (1974): 21; Szónyi, Eszter. "Arrabona késő római temető I. Vasútállomás környéki temető." <i>Arrabona</i> 21 (1979): 7.
Azaum (Almásfüzitő)	Kuzsinszky, Bálint. "Aquincumi sírlelet." <i>Budapest Régiségei</i> 10 (1923): 62.
Brigetio (Ószőny)	Sági, Károly. "Temetők." In <i>Intercisa</i> Vol. 1., ed. Károly Sági et al. Budapest, 1954, 68.
Castra ad Herculem (Pilismarót)	Barkóczi, László. "Későrómai temető Pilismaróton." <i>Folia Archaeologica</i> 12 (1960): 116.
Intercisa (Dunapentele- Dunaújváros)	Alföldi, Mária. "Perlen-Ketten-Anhänger." In <i>Intercisa</i> Vol. 2. Budapest, 1957, 440–455; Facsar, G., I. Skoflek, Á. Salamon. "Eine Kapsel Frucht (Antirrhnum) aus Einer Römischen Bulla und bullen aus Bestattungen von Intercisa." <i>Mitteilungen des Archäologischen Institut der Akademie der Wissenschaften</i> 7 (1977): 93–108; Salamon, Ágnes, and László Barkóczi. "Archäologische Angaben zu Spätromischen Geschichte des Pannonischen Limes-Gräberfelder von Intercisa I." <i>Mitteilungen des Archäologischen Institut der Akademie der Wissenschaften</i> 4 (1973): 73–95; Sági, Károly. "Temetők." In <i>Intercisa</i> Vol. 1., ed. Károly Sági et al. Budapest, 1954, 44–100; Vágó, Eszter and István Bóna. <i>Die Gräberfelder von</i>



Late Roman *Bullae* and Amulet Capsules in Pannonia

	<i>Intercisa I. Der Spätromische Südstfriedhof.</i> Budapest: Akadémiai Kiadó, 1976, 30–32, 40, 77.
Keszthely-Dobogó	Sági, Károly. “Die Spätromische Bevölkerung der Umgebung von Keszthely.” <i>Acta Archaeologica Academiae Scientiarum Hungaricae</i> 12 (1960): 216.
Kő	Dombay, János. “Későrómai temetők Baranyában.” <i>A Janus Pannonius Múzeum Évkönyve</i> 2 (1956): 239–240.
Kővágószőlős	Burger, Alice. “The Roman Villa and Mausoleum at Kővágószőlős, near Pécs (Sopiane). Excavations 1977–1982.” <i>A Janus Pannonius Múzeum Évkönyve</i> 30–31 (1985–86): 161, 202.
Majs	Burger, Alice. “Római kori temető Majson.” <i>Archaeologiai Értesítő</i> 99 (1972): 71.
Mursella (Kisárpás), Kőhíd-dűlő	Bíró, Endre. “A kisárpási későrómai temető.” <i>Archaeologiai Értesítő</i> 86 (1959): 174.
Solymár	Kocztur, Éva. “Kora császárkori temető Solymáron.” <i>Studia Comitatusia</i> 21 (1991): 202.
Somodor, Somodor-pusztá	Burger, Alice, “Római kori temető Somodor-pusztán.” <i>Archaeologiai Értesítő</i> 101 (1974): 84.
Sopianae (Pécs)	Fülep, Ferenc, Sopianae. <i>The History of Pécs during the Roman Era, and the Problem of the Continuity of the Late Roman Population.</i> Budapest: Akadémiai Kiadó, 1984, 72, 102–103, 125–126, 214.
Tricciana (Ságvár)	Bilkei, Irén. “Griechischen Inschriften des römischen Ungarns.” <i>Alba Regia</i> 17 (1979): 33; Burger, Alice. “The Late Roman Cemetery at Ságvár.” <i>Acta Archaeologica Academiae Scientiarum Hungaricae</i> 18 (1966): 110, 113, 126, 132.
Ulcisia Castra, Római Sánc St (Szentendre)	Maróti, Éva, and Judit Topál. “Szentendre római kori temetője.” <i>Studia Comitatusia</i> 9 (1980): 95–177.