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AN UNPUBLISHED CHANCE FIND OF A ROMAN PHARMACEUTICAL/COSMETICS WEIGHING SCALE FROM THE UNRECORDED SITE OF GRADINA IN LAŠVA NR. ZENICA[1]

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Abstract: *Medicine and pharmacology, and the preparation of various drugs, medicaments and cosmetics, are known to have been present in Bosnia and Herzegovina as long ago as in prehistoric times. With the evolution of society in antiquity and the Roman conquest of this region, the local population adopted the experience of the Romans in this field and applied new methods of medical and cosmetic treatment. Evidence of these is to be found in various archaeological finds: glass vessels, mortars, tweezers, curettes, knives, scales and other instruments. Among the most recent finds is a previously unpublished Roman weighing scale, found at the hitherto unrecorded archaeological site of Gradina in Lašva near Zenica.*

Key words: Roman pharmaceutical/cosmetic scale, medicine, Bosnia and Herzegovina

Introduction

Since ancient times, human communities have striven to develop methods of healing and treating illnesses. Basic knowledge of medicine and pharmacology was acquired in prehistoric times, and was further developed later, in antiquity. With the passage of time, scientifically-based methods using curative preparations and medical treatments of the sick were developed to supplement magic as a means of healing. The use of various instruments was an integral part of this process.

The evolution of medicine may be traced through a study of written sources and of finds of medical, pharmaceutical and cosmetic instruments or various articles used in the treatment of the sick. Archaeological excavations have uncovered a

[1] This paper was published thanks to my colleague Edin Bujak MSc, who handed the subject over to me for publication, for which I take this opportunity to express my warmest gratitude.

range of instruments, including surgical knives (*culter*), various kinds of scalpel (*scalper*), instruments for transplants (*trypanon*), hooks for the extraction of calculi (*lithououlkos*), lancets (*phlebotomum*), forceps (*forfex*), tweezers (*volsella*), dentists' forceps (*forceps*), elevators (*elevatorium*), curved probes (*hamus*), saws (*serrula*), anal and vaginal specula (*speculum Magnum Matris*), cauterisers (*ferrum candres*), needles (*acus*), various kinds of speculum (*specilla*), spoons (*cyathiscomela*), catheters (*fistula*), cupping glasses (*curcubitula*) and many more.[2]

There is no doubt that there were great advances in medicine and pharmacology in Roman times, as well as in the diagnosis and treatment of human diseases.[3] These advances are comparable with those in technology, agriculture, animal husbandry, architecture, military doctrine and many other aspects of Roman society. Key to this was the fact that the Romans learned from the experience of the many people they subjugated or with whom they came into contact, comparing and combining these experiences innovatively to perfect a range of methods and procedures.

The development of medicine in ancient times

In ancient Greece, medical treatment was often carried out in temples to Asclepius.[4] Later, the cult of Asclepius spread throughout the Roman Empire, under the Latinised name Aesculapius.[5] The cult of Aesculapius was introduced to Rome in 293 BC, in response to an epidemic of the plague, when the Roman Senate consulted the Sibylline books for advice.[6] The priests of Aesculapius were among the most skilled physicians. With the passage of time the first official schools providing education and training for physicians were opened. As well as the temples of Aesculapius,[7] guilds evolved of physicians known as Asclepiads, who were not priests. These guilds became the nucleus of medical schools, the most famous of which were in Knidos, Kos and Kroton. Each school had its own methods, and concentrated on a certain diagnosis, methods, curative substances, herbs and therapies.[8]

Medical know-how based on scientific discoveries began to spread from ancient Greece throughout the Mediterranean, where Alexandria came to occupy a central place in the development of medicine.[9] The most important physicians of Alexand-

[2] K. A. Giunio – T. Alihodžić, 2010, 26-27, A. Busuladžić, 2015, 174-187.
[3] T. Šeparović – N. Uroda, 2009, 12.
[4] For Asclepius, see A. Busuladžić, 2010, 125.
[5] V. Vučevac–Bajt, 2012, 56-57.
[6] K. A. Giunio – T. Alihodžić, 2010, 14-15, M. Wokaunn – H. Manenica, 2010, 244.
[7] V. Vučevac–Bajt, 2012, 56.
[8] K. A. Giunio – T. Alihodžić, 2010, 9.
[9] S. Krunić, 1992, 9.

ria were Herophilus and Erasistratus.[10] Later, Rome became the centre of medicine, with its official schools known as *schola medicorum*.[11]

The Romans drew their medical experience from the Greeks and the Etruscans, while the ancient Greeks themselves had based their knowledge on Mesopotamian and ancient Egyptian medicine.[12] In the early Roman times, the Greeks still had a monopoly over medicine, on account of the entrenched Roman view that it was shameful to practise medicine.[13] It is known from the writings of Marcius Portius Cato that he forbade his sons to have dealings with Greek doctors. Cato and Columella, on the other hand, relied on local medicine based on Roman knowledge of botany and surgery, as well as on magic.[14] These first doctors were from the ranks of freed slaves, later becoming Roman citizens. All this contributed to the development and advancement of medicine as both science and practice.

Along with medical practice based on scientific experience, religious or superstitious treatment of the sick was not uncommon. Almost every part of the body, every disease, had its own deity. *Hepatoscopy*, for example, the reading of divine messages or foretelling the future from the liver of a sacrificial animal,[15] derived from a Etruscan custom.[16]

The names of physicians or pharmacists have come down to us from written sources: Galen,[17] Archagathus,[18] Asclepiades,[19] Dioscurides,[20] Themison,[21] Alcmaeon and Epicles,[22] Celsus[23] and Soranus. They were not only skilled surgeons but were also familiar with a wide range of medicinal plants, anatomy, psychiatry, anaesthesiology and gynaecology, and composed numerous works setting out their knowledge of medicine and pharmacology. Pliny the Elder composed a 37-volume encyclopaedia which included entries on medicine and botany.[24] Four works by Dioscurides have also survived, in which he wrote about acute and chronic diseases and much else besides.[25]

[10] K. A. Giunio – T. Alihodžić, 2010, 12-13.
[11] A. Busuladžić, 2015, 170.
[12] M. Wokaunn – H. Manenica, 2010, 243.
[13] K. A. Giunio – T. Alihodžić, 2010, 19.
[14] Ibid, 16-17.
[15] Ibid, 13-14.
[16] M. Wokaunn – H. Manenica, 2010, 243.
[17] P. A. Baker, 2000, 29, V. Vučevac–Bajt, 2012, 73-76.
[18] K. A. Giunio – T. Alihodžić, 2010, 17.
[19] Ibid, 18 and 20.
[20] V. Vučevac–Bajt, 2012, 82.
[21] K. A. Giunio – T. Alihodžić, 2010, 20.
[22] Ibid, 9.
[23] V. Vučevac–Bajt, 2012, 81.
[24] Ibid, 81.
[25] M. Wokaunn – H. Manenica, 2010, 245-246.

The social standing of physicians in Rome was greatly improved in 46 BC, when Gaius Julius Caesar granted Roman citizenship to foreign doctors. Later, the state having begun to appreciate the importance of their work, Emperor Hadrian granted physicians and other people engaged in the noble professions exemption from a range of public duties.[26]

As Roman influence spread to other parts of the world, so too those regions became Romanised, thanks to the Roman army.[27] Along with the building of roads and military forts, Roman villas and baths, urban settlements and veterans' quarters, the first physicians and pharmacists also came to this part of the world. Roman military doctors concentrated mainly on the army's needs, but later also treated Roman citizens.[28] The presence of military doctors is attested in both regular and auxiliary troops as well as in the naval fleet.[29]

The importance of physicians to the Roman army is amply attested by the fact that Emperor Augustus passed a law requiring each legion to have five and each cohort one doctor.[30] He also established a professional military physicians' service, granting land, pensions, their own separate legal status, and above-average pay to doctors, and also forming a compulsory military medical school.[31] Standard regulations governing the number of doctors in a given settlement were imposed by the state. Antoninus Pius permitted a maximum of five doctors to work in small towns, seven in medium-sized ones, and no more than ten in large towns and provincial capitals.[32] Municipal doctors in provincial towns had the title of *archiatri populares*.[33] The most common title for a physician, however, was *medicus*. The title *medicus duplicarius* is found in documents pertaining to the navy.[34] Some sources refer to doctors in the group of *principales*.[35] Sources also attest to the titles *medicus castrenins* or *medicus castrorum*, indicating military physicians.[36] These military doctors were directly responsible for the care of wounded or sick soldiers in the various units. A distinct category of doctor in Roman times was that of *medicus chirurgus*.[37] The medical service as a whole, military physicians and surgeons, came under a se-

[26] K. A. Giunio – T. Alihodžić, 2010, 18-19.
[27] P.A. Baker, 2000, 10-11.
[28] Ibid.
[29] S. Krunić, 1992, 9.
[30] E. Künzl, 1988, 68.
[31] M. Wokaunn – H. Manenica, 2010, 246.
[32] H. Gummerus, 1932, 9.
[33] Ibid, 8.
[34] S. Krunić, 1992, 10.
[35] R. W. Davies, 1969, 85.
[36] S. Krunić, 1992, 10.
[37] C. Daremberg – E. Saglio, 1904, 1106-1115.

parate command, that of the *praefectus castrorum*.[38] The most eminent physicians and heads of collegia were also the Emperor's personal physicians, with the title of *archiatrus*.[39] Since much of the medical and pharmaceutical equipment presented here was found in Stolac and Ljubuški, places where there was without doubt a major military presence in military camps,[40] as well as settlements for time-served military veterans,[41] these finds may be directly associated with military physicians.

The first classic hospitals – *valetudinaria* – appear as a feature of military camps,[42] referred to as *capsarii* or *optiones valetudinarii*.[43] Clinics, known as *tabernae medicae*, governed by law, feature in urban settlements, where doctors treated citizens, even providing free care for the poorest.[44] These municipal physicians, who were remunerated from public funds, were known as *archiari populares*.[45] Military doctors were often of equal standing with officers, with the concomitant privileges and ranks. Such doctors often also set up private clinics, making it quite difficult to distinguish between military and civilian physicians.[46] It is very likely that military doctors also provided medical care for the civilian population, in line with the capacity and needs of both parties.[47]

The military reforms launched by Emperor Augustus included the rule that every army camp must have a hospital.[48] A list of military hospitals dating from the reign of Emperor Trajan has survived.[49] A standard footprint of 15x20 metres was prescribed for these hospitals, as was their general layout: each Roman hospital would have an inner courtyard, a large hall, a portico, wards for the sick, latrines and baths.[50]

The treatment of animals used by the military, mainly horses, gave rise to specialist veterinarians, one of the most famous of whom was Apsyrtus, regarded as the founding father of scientific veterinary medicine.[51]

Since medical treatment included prescribing medicaments, the same persons were frequently both physicians and apothecaries, with pharmacology evolving in

[38] G. Webster, 1969, 251.
[39] M. Wokaunn – H. Manenica, 2010, 246.
[40] I. Bojanovski, 1981, 63-66, R. Dodig, 2011, 327-343.
[41] S. Ferjančić, 2002.
[42] P.A. Baker, 2000, 180-236.
[43] H. Gummerus, 1932, 14.
[44] A. Busuladžić, 2015, 172.
[45] S. Krunić, 1992, 11.
[46] H. Gummerus, 1932, 15.
[47] P.A. Baker, 2000, 126-128.
[48] A. Busuladžić, 2015, 172.
[49] S. Krunić, 1992, 11.
[50] Ibid, 11.
[51] V. Vučevac–Bajt, 2012, 83.

tandem with medicine itself.[52] A Roman doctor had to be familiar not only with surgery but also with medicinal plants, and with the various methods of producing herbal compounds, ointments, compresses, tablets and salves.[53] The Romans also knew how to make pills, and used lead in medical treatments. They used such herbs and spices as dill, wild chicory, cumin, cinnamon, poppy, cardamom, ivy, saffron and valerian.[54]

The Romans were also concerned with health in general, aware of the importance of keeping fit and healthy through personal hygiene, a healthy diet, physical exercise and the like.[55] With this in mind, the Romans invested heavily in infrastructure such as drainage and the supply of drinking water to urban and rural settlements, and the construction of hospitia,[56] bath-houses,[57] gymnasia and so forth.[58] The largest drainage system in Rome, the *Cloaca Maxima*, was constructed as early as the 4th century BC. The Romans inherited their knowledge of water supply and drainage systems from the Etruscans, and greatly advanced the technology. Aqueducts were built to bring water to homes and settlements, as were latrines and water tanks. Urban aediles were responsible for the cleanliness of main streets and squares.[59]

The Romans steadily improved the general health system by introducing successive legislation designed to raise health standards.[60] As well as laying water mains and taking steps to improve land quality, they introduced regulations governing the burial of the dead and others relating to food quality standards, and conducted regular medical checks of prostitutes; these were just some of the measures reflecting Roman concern for the health of the population.[61]

Concern for health through hygiene and the application of pharmaceuticals was accompanied by the use of cosmetics. Women especially sought to beautify themselves, using lye soap and washing their hair with a compound based on caustic soda or powdered clay. Lotions, creams and fragrant oils were kept in small flasks and boxes. Hairpins, combs and mirrors were essential accoutrements.[62] Surviving sources give numerous recipes for the preparation of cosmetics to preserve

[52] S. Krunić, 1992, 11-12.
[53] V. Vučevac–Bajt, 2012, 82.
[54] K. A. Giunio – T. Alihodžić, 2010, 36-37, 55, 58-59.
[55] A. Busuladžić, 2015, 173.
[56] A striking example of a hospice is to be found in Aquae S... at Ilidža near Sarajevo. See E. Pašalić, 1959, 113-136.
[57] S. Ivčević, 2002, 336.
[58] S. Krunić, 1992, 12-14.
[59] M. Wokaunn – H. Manenica, 2010, 247.
[60] A. Busuladžić, 2015, 173.
[61] K. A. Giunio – T. Alihodžić, 2010, 41-43.
[62] M. Wokaunn – H. Manenica, 2010, 247.

one's looks: hair dyes, anti-wrinkle creams, depilatory creams, rouge for the cheeks, eye shadow, and body oils. Asses' milk is known to have been used to keep the skin fresh. Nor did men spurn the use of cosmetics.[63] They sought to enhance their complexions and conceal or eliminate freckles, pimples and scars using various creams, oils and powders. The substances used to make these included bear, swan, duck or goose fat, almonds, olive and rose oil, asses' milk, wax, butter, honey, vinegar, plants such as narcissus, lupine, incense, poppy, saffron, ground minerals, lead white, wine lees and so on.[64] The same was true of the preparation of scents, balms and perfumes.[65] The preparation of all these products involved the use of several different instruments, among which scales were almost certainly an important item, given the need to weigh exact amounts of the substances used.

Frequent wars as well as peace-time diseases made it vital to advance medical science, including the manufacture of medical and pharmaceutical instruments and equipment.[66] Numerous archaeological finds of such instruments, including scales such as the subject of this paper, provide evidence of this.

Evidence of Roman medicine in present-day Bosnia and Herzegovina

Anthropological osteological analyses of remains from the area inhabited by the Illyrians in the pre-Roman period have revealed highly skilled surgery involving the extraction of teeth and the removal of parts of the mandible and of cysts, evidence of the presence of doctors even before the Roman conquest, but also, undoubtedly, of contacts with more advanced cultures such as that of Greece.[67]

The pre-Roman Illyrians also practised magic medicine, which continued in use into late antiquity. Witch-doctors from Pannonia were of particular renown in the Roman period.[68] Some sources claim that the man whose touch cured Emperor Hadrian of fever was from that province.[69]

Roman medicine and pharmacology in the provinces of Dalmatia and Pannonia was also associated with the pre-Roman Illyrian tradition. The Illyrians were familiar with many medicinal herbs, which they used to treat a range of diseases. Iris was used to treat ulcers and to cure headaches, as a sedative and to induce abortion, as well as to make perfumes and to eliminate halitosis. Another highly valued plant in antiquity was the great yellow gentian, *Gentiana lutea* L, named after the Illyrian

[63] S. Ivčević, 2002, 329-330.
[64] K. A. Giunio 2016, 37-47.
[65] Ibid, 47-63.
[66] P. A. Baker, 2000, 137-142.
[67] A. Stipčević, 1991, 68-69.
[68] A. Busuladžić, 2015, 170.
[69] A. Stipčević, 1991, 68.

king Gentius, thought to have been the first to recognise its curative properties.[70] Many plants were thought to have healing properties: iris, basil, mint, garlic, mugwort, valerian, belladonna, incense, myrtle, sage, St John's wort and aniseed. Sources reveal that *Iris illyrica*[71] from the Neretva valley region was especially highly valued for both pharmaceutical and cosmetic purposes.[72]

Religious monuments relating to medicine have been found in present-day Bosnia and Herzegovina, among them monuments dedicated to Asclepius and Hygeia.[73] Another divinity associated with healing who featured here is the Greek god Apollo.[74] These finds demonstrate that cults, associated with healing and health, were also present in the interior of the province of Dalmatia.

As Roman medicine evolved, some physicians came to specialise in certain conditions and diseases. Written sources reveal that there were specialist surgeons, eye, mouth and teeth doctors, pharmacists, and even gynaecologists[75] as well as veterinarians.[76] This led gradually to the establishment of Roman medical boards, organised around the cults of Asclepius and Hygeia.[77] The great popularity of the god Aesculapius among the Illyrians in Roman times is clear evidence of the evolution of medicine and its presence among the local population in present-day Bosnia and Herzegovina and beyond.[78]

Baths and hospice complexes were built around natural hot, sulphur or healing springs.[79] This region abounds in mineral springs, of which more than a hundred have been recorded to date. They are of markedly different kinds, as both the ancient inhabitants of present-day Bosnia and Herzegovina and the incoming Romans recognised. Among them are simple thermal springs, soda springs, calcic springs, alkaline springs, saline or muriatic springs, sulphur springs, chalybeate and sulphuric springs.[80]

The Romans took advantage of these to build baths and spas, of which traces have survived at Laktaši,[81] Domavia,[82] and Aquae S ... near Sarajevo,[83] where a hos-

[70] Ibid.
[71] Ibid; V. Vučevac–Bajt, 2012, 82.
[72] M. Wokaunn – H. Manenica, 2010, 244.
[73] E. Imamović, 1977, 217-220.
[74] Ibid, 211-212.
[75] H. Gummerus, 1932, 9.
[76] K.A. Giunio – T. Alihodžić, 2010, 27, V. Vučevac–Bajt, 2012, 76-85.
[77] H. Gummerus, 1932, 9.
[78] A. Stipčević, 1991, 68.
[79] A. Busuladžić, 2015, 173.
[80] F. Katzer, 1919, 260-263.
[81] I. Kellner, 1890, 55-63.
[82] W. Radimsky, 1892, 1-24.

pice was built around the sulphuric springs. This offered hostel accommodation, but was primarily designed as a healing spar for the sick, both the local population and Roman soldiers. Many Roman villas included what were clearly bath houses as part of the residential complex. All this is evidence of the owners' high standards of hygiene. Among villas with their own bath houses are those in Vile in Višići, Panik, Ljusina, Rankovići, Suvaja and Tišina,[84] a boon to the state of health of the population, especially of course for the owners of such villas.

A pharmaceutical-cosmetic weighing scale found in Bosnia and Herzegovina

Parts of a small bronze weighing scale, a chance find in Bosnia and Herzegovina, came to the archaeological reference collection of the chair of archaeology at the Faculty of the Humanities, University of Sarajevo. These consist of part of the pan on which the material to be weighed was placed, and the beam. The beam is 6.8 cm long and the pan is 4.9 cm in section. The scale was found at Gradina in Lašva, near Zenica. Its small size allows us to state with confidence that it was used to weigh precise small quantities of materials, such as would be required solely in the preparation of medicaments or cosmetics.

Vitruvius described Roman weighing scales in the 1st century BC. The scale he described was the kind with a sliding weight, used to weigh objects of 10 to 20 kilograms. There were also smaller scales, up to 20 cm or so, used to weigh more accurately materials used for medical, pharmaceutical and cosmetic purposes.[85]

The basic components of sliding weight scales are a beam with a scale and two unequal arms, with a pan or hook hanging on one side for the object or load to be weighed. The balance weight was on the other arm, which was calibrated with a scale. The weights were made of stone or metal – sometimes of different metals around a lead core. The weights could be spherical, biconical, pear-shaped, acorn-shaped, pyramidal or cylindrical, or might be in the shape of animal or human figures or other designs.[86]

The weight of the load in the pan or hook on the shorter arm was determined by sliding the weight along the calibrated arm. The relevant point on such a scale was zero, which was where the weight was located when the scale was in equilibrium without a load.[87] To determine the weight of a load, the weight was slid along the longer arm until the scale was again in equilibrium. Some faces were calibrated

[83] E. Pašalić, 1959, 113-136.
[84] A. Busuladžić, 2011, 50-54, 62-65.
[85] A. Busuladžić, 2014, 133.
[86] M. Šimek, 2011, 17-18.
[87] A. Busuladžić, 2014, 134.

with more than one scale, to weigh lighter or heavier loads. The shorter the arm is for the load, the greater the weight that could be measured. The scale was read from right to left, and was held in the right hand, while the weight was slid along the longer arm with the left hand. This type of scale, which was practical and simple to use, was very widespread,[88] and was a major advance on the earlier equal-armed beam scale. Scales have been found at many sites in Bosnia and Herzegovina,[89] and in Osijek,[90] Split,[91] Romuliana, Jelnica,[92] Siscia,[93] Aquincum, in Belgium, and elsewhere.[94]

A number of Roman scales of various sizes, designed to weigh larger loads, have also been found in Bosnia and Herzegovina[95] as well as smaller scales used to weigh small quantities, probably used in the making of balms, ointments, teas and cosmetics.[96] Archaeological finds of cosmetics accoutrements and medical and pharmaceutical instruments in present-day Bosnia and Herzegovina attest to the presence of persons with specialist skills and knowledge or of those who used such knowledge in the fields of medicines and cosmetics.[97] Such artefacts have been found near Stolac,[98] at Konjević Polje in eastern Bosnia[99] and in the urban settlement of Aquae S ... near Sarajevo,[100] while identical scales have been found at the multistratum site of Debelo brdo, also near Sarajevo.[101] These finds support the notion that the Roman scales described in this paper may have been owned by a person engaged in such activities.

[88] M. Šimek, 2011, 13-26.
[89] F. Fiala, 1894, 121, T. XII, fig. 11-14, I. Kellner, 1895, 178, fig. 40.
[90] M. Bulat, 1977, 45, Tab. XIX, fig. 5.
[91] T. Šeparović – N. Uroda, 2009, 76-77.
[92] Grupa autora, 2014, 164.
[93] Z. Gregl, 1984, 178, fig. 1.
[94] S. Krunić, 1992, 22.
[95] A. Busuladžić, 2014, 133 and 202.
[96] Ibid, 134 and 202.
[97] O kozmetičarstvu vidi: K. A. Giunio, 2016, 37-63.
[98] V. Atanacković-Salčić, 1979, 7-40.
[99] I. Bojanovski, 2001, 182.
[100] I. Kellner, 1895, 178, fig. 40.
[101] F. Fiala, 1894, 121, T. XII, fig. 11-14.

Аднан БУСУЛАЏИЌ

Еден необјавен случаен наод на римска фармацевтска/козметичка вага од неевидентираниот локалитет „Градина у Лашви“ кај Зеница

Резиме

Развојот на медицината и фармацијата, како и подготовката на различни лекови, подготовки и козметички препарати, на територијата на Босна и Херцеговина бил присутен уште во праисторискиот период. Со развојот на антиката и римските освојувања на овие подрачја, народот ги усвојувал искуствата во оваа област и применувал и нови методи при лекувањето и во козметиката. Различни археолошки наоди на стаклени садови, пинцети, медицински лажици, ножеви, скалпели, ваги и други инструменти се доказ за овие активности. Меѓу најновите наоди е и досега непубликуваната вага од римскиот период, која е пронајдена на досега неевидентиран археолошки локалитет – Градина у Лашви кај Зеница.

На територијата на денешна Босна и Херцеговина, како случаен наод, во археолошката збирка на Катедрата за археологија при Филозофскиот факултет, Универзитет во Сараево дојден е примерок на бронзена вага со мали димензии. Од вагата се зачувани делови од тасот на кој се ставал материјалот за вагање, како и попречната греда. Должината на попречната греда е 6,8 см, а пресекот на тасовите на кои е ставан материјалот за вагање е 4,9 см. Вагата е пронајдена на локалитетот Градина у Лашви кај Зеница. Поради нејзините мали димензии, со сигурност може да се утврди дека станува збор за вага која служела за мерење прецизни мали количини, за што може да се претпостави исклучиво во својство на мерење ствари во улога на подготовка на медикаменти или козметички препарати.

За присуството на луѓе со специјализирани вештини и знаења или, пак, оние кои ги користеле овие знаења од областа на медицината и козметиката, на тлото на денешна Босна и Херцеговина потврда ни даваат археолошките наоди на козметичка опрема и медицинско–фармацевтски инструменти пронајдени во близина на Штоц, на локалитетот Коњевиќ Поље во Источна Босна, урбаната населба Aquae S... кај Сараево, како и идентични примероци на ваги пронајдени на повеќеслојниот локалитет Дебело Брдо кај Сараево. Наведените наоди се додатен прилог дека и римската вага, која е предмет на анализа во овој труд, ја ставиме во сопственост на лице кое се занимавало со овој вид на работа.

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