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On Frankincense-scented Soaps, Peelings and Cleansers or on Cosmetics and Commotics in Antiquity and Early Byzantium[2]

1. Cosmetics and commotics

Cosmetology ("τέχνη κοσμητική"), i.e. a resource of means aimed at maintaining natural beauty of a human, was not frowned upon by the pagans nor by the Christians, because it was thought to be a branch of medicine[3], i.e. of an art which was supposed to bring them health and wellbeing[4]. The rea-

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[3] On the Christians' attitude towards medicine – D.W. Amundsen, *Medicine and Faith in Early Christianity*, "Bulletin of the History of Medicine" 56 (1982) p. 326-350; V. Nutton, *From Galen to Alexander. Aspects of Medicine and Medical Practice in Late Antiquity*, DOP 38 (1984) p. 5-6; V. Nutton, *Ancient Medicine*, London – New York 2005, p. 302-303; G.B. Ferngren, *Medicine and Health Care in Early Christianity*, Baltimore 2009, p. 13, 25-41.

[4] The subject has been recently analysed by Serena Buzzi (*L'igiene in eta tardoantica*: *Oribasio di Pergamo*, Alessandria 2018).

sons why cosmetics were so widely used is best explained by Galen (2nd/3rd c. AD), an authority fully revered by the pagans as well as completely accepted by the Christians. He defines cosmetology as taking care of preserving the outward appearance of each part of the human body and argues that their good condition, which is perceived as beauty, has a physiologically important role in achieving health. He adds, however, that there is another body of medical knowledge, and it seeks to add to or even to change drastically what was given by nature. It is called commotic, i.e. "τὸ κομμωτικὸν τῆς ἰατρικῆς μέρος" (the commotic branch of medicine), and is classified by Galen as a misuse of medical competence, i.e. "κακία" (i.e. vice)[5]. Anyway, Galen's words show that cosmetology was approved of because it was regarded to be a resource of knowledge and skills aimed at preserving health. On the other hand, commotic was thought to produce an acquired allure[6], having at its disposal an inventory of different, often pernicious, preparations, i.e. commotics[7]. All in all, cosmetology was morally indifferent while commotic was considered to transgress what is ethically acceptable.

The above division between cosmetology and commotic held fast in the Church Fathers' teachings. It is clearly visible in Clement of Alexandria's (2nd/3rd c. AD) writings, who was almost a contemporary of Galen, and took interest in the problem of body care for ethical reasons. He did not ob-

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[5] Galenus, *De compositione medicamentorum secundum locos* 434, 3-435, 5, v. 12. A similar definition – Galenus, *De usu partium* 24, 16-25, 3, v. 3.

[6] On commotic – V. Boudon-Milliot, *Fards et teintures capillaires*: *la médecine galénique entre cosmétique et commôtique*, in: *La coupe d'Hygie. Médecine et chimie dans l'Antiquité (Actes de la journée d'étude internationale organisée à Paris, au C2RMF, le 24 juin 2011)*, ed. M. Pardon-Labonnelie, Dijon 2013, p. 17-32; V. Boudon-Milliot, *Greek and Roman Patients under Galen's Gaze: A Doctor at the Crossroads of Two Cultures*, in: *'Greek' and 'Roman' in Latin Medical Texts: Studies in Cultural Change and Exchange in Ancient Medicine*, ed. B. Maire, Leiden – Boston 2014, p. 21-23; V. Boudon-Milliot, *Souffrir pour être belle (ou beau). Thérapeutique et cosmétique dans l'Antiquité*, in: *Le teint de Phrynè Thérapeutique et cosmétique dans l'Antiquité*, ed. V. Boudon-Millot – M. Pardon-Labonnelie, Paris 2018, p. 16-20; Buzzi, *L'igiene*, p. 107-109; I. Calá, *Some Cosmetic Recipes in Medical Texts of Late Antiquity*: *Treatments For the Face in the Libri Medicinales of Aetius Amidenus*, "Meridies. Estudios De Historia Y Patrimonio De La Edad Media" 11 (2020) p. 3.

[7] They are enumerated by Galen when he referred to the contents of Book 1 and 2 of Κοσμητικά (*On Cosmetics*) by Titus Statilius Criton of Heraclea – Galenus, *De compositione medicamentorum secundum locos* 446, 14-448, 6, v. 12. On Galen's interests in his output – A. Guardasole, *Galien de Pergame et la transmission des traités anciens de cosmétique*, in: *Le teint de Phrynè Thérapeutique et cosmétique dans l'Antiquité*, ed. V. Boudon-Millot - M. Pardon-Labonnelie, Paris 2018, p. 48-50.

ject to paying heed to the outward appearance but disapproved of abusive practices in this respect. The whole Chapter 2 of *Paedagogus* is, in fact, a definition of what commotic is. Similarly to Galen, Clement concludes that it is an art of changing one's looks[8] to the detriment of one's health[9] by means of applying a wide range of preparations such as hair curling lotions ("πλοκάμων ἐνουλισμοί") [10], face creams ("χρίσματα παρειῶν")[11], hair dyes ("βαφαὶ τριχῶν")[12], mascaras ("ὑπογραφαὶ ὀφθαλμῶν")[13], rouge ("φῦκος")[14], powders ("ἐντρίμματα") [15], etc. The term is used by Clement only in reference to women. Some, he says, do not care to spend time at home with their men but, loosening their husbands' purse-strings, spend money on a vain pursuit of beauty. They waste whole days, he continues, on beautifying themselves ("κομμωτικῇ σχολάζουσιν"), hiding themselves in the privacy of their own rooms so as not to be caught bleaching their hair[16]. Clement's treatise teaches, however, that the term could be equally used in connection with men, who, as he maintained (and his opinion is corroborated by Galen's remarks)[17], are also vulnerable to a tendency of paying too much attention to the way they look[18].

The term commotic was also included by Basil of Caesarea (4th c. AD) in his characterisation of Vice in the famous parable on Heracles at the crossroads[19], and used by his younger brother, namely Gregory of Nyssa (4th c. AD). The latter understood "κομμωτικὴ περιεργία" as commotic futility, which was for him an art of procuring spurious and craftily devised beauty[20], leading to effeminacy (i.e. weakness)[21]. Such contradicted natural beauty, i.e. "κάλλος αὐτοφυές"[22]. Yet another definition of commotic is suggested by Theodoret of Cyrus (4th/5th c. AD). Notably, he alludes to

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8 Clemens Alexandrinus, *Paedagogus* III 2, 6, 3, 1-2.
9 Clemens Alexandrinus, *Paedagogus* III 2, 6, 4, 3.
10 Clemens Alexandrinus, *Paedagogus* III 2, 5, 1, 1-2.
11 Clemens Alexandrinus, *Paedagogus* III 2, 5, 1, 2-3.
12 Clemens Alexandrinus, *Paedagogus* III 2, 5, 1, 3-4.
13 Clemens Alexandrinus, *Paedagogus* III 2, 5, 1, 3.
14 Clemens Alexandrinus, *Paedagogus* III 2, 5, 2, 3.
15 Clemens Alexandrinus, *Paedagogus* III 2, 5, 2, 3.
16 Clemens Alexandrinus, *Paedagogus* III 2, 5, 4, 4-6, 1, 4.
17 Galenus, *De compositione medicamentorum secundum locos* 435, 2-3, v. 12.
18 Clemens Alexandrinus, *Paedagogus* III 3, 15, 1, 1-8.
19 Basilius Caesarensis, *De legendis gentilium libris* 5, 55-77.
20 Gregorius Nyssenus, *Contra Eunomium* I 19, 1-3, GNO 1.
21 Gregorius Nyssenus, *Contra Eunomium* II 128, 1-129, 3, GNO 1.
22 Gregorius Nyssenus, *De vita Gregorii Thaumaturgii* PG 46, 21, 48-50.

"τὸ κομμωτικόν"[23] or "κομμωτικὴ τέχνη"[24], writing that the terms refer to "ἐξ ἐπιτεχνήσεως […] κόσμος" (i.e. artificial beauty), which is indecent, and contrasting it with "τῆς φύσεως […] κάλλος", i.e. with natural beauty (which is laudable)[25]. He uses the word metaphorically, in the context of the art of rhetoric[26] but he also makes use of its literary meaning in connection with the outward appearance[27]. The present study, however, is not concerned with moral teachings on cosmetics or commotics. Its focus is purely historical, and that is why it is designed to present some information on what sort of preparations was at the disposal of people who cared for their physical cleanliness (and, obviously, for health) regardless of their religious proclivities.

2. In order to wash one's face

Extant ancient and Byzantine medical sources preserve information on the development of cosmetology. A fine example of a work which includes prescriptions for cosmetics is the medical encyclopedia entitled *Iatricorum libri*, written in the 6th c. AD by Aëtius of Amida. He studied medicine in Alexandria and may have worked in Egypt for some time prior to opening his own practice in Constantinople, which later landed him in the court of Justinian the Great (6th c. AD)[28]. There is a supposition that he held the post of Empress Theodora's personal physician[29]. He was Christian but, on the

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[23] Theodoretus, *Interpretatio in Psalmos* PG 80, 1964, 33.

[24] Theodoretus, *Haereticarum fabularum compendium* PG 83, 488, 4; Theodoretus, *Graecarum affectionum curatio* 5, 75, 6; 8, 1, 14.

[25] Theodoretus, *Interpretatio in Psalmos* PG 80, 1964, 30-34; Theodoretus, *Graecorum affectionum curatio* 8, 1, 13-2, 1.

[26] Theodoretus, *Graecorum affectionum curatio* 5, 75, 1-10.

[27] Theodoretus, *Haereticarum fabularum compendium* PG 83, 488, 1-7.

[28] Select information on the physician – J. Scarborough, *Aëtius of Amida (500–550 CE)*, in: *The Encyclopedia of Ancient Natural Scientists. The Greek Tradition and its Many Heirs*, ed. P.T. Keyser – G. Irby-Massie, London – New York 2008, p. 38-39; S. Buzzi – I. Calá, *Le ricette cosmetiche nelle enciclopedie mediche tardoantiche*, in: *Collecting Recipes. Byzantine and Jewish Pharmacology in Dialogue*, ed. L. Lehmhaus – M. Martelli, Boston – Berlin 2017, p. 128-131; P. Bouras-Vallianatos, *Galen in Late Antique Medical Handbooks*, in: *Brill's Companion to the Reception of Galen*, ed. P. Bouras-Vallianatos – B. Zipser, Leiden – Boston, 2019, p. 41-42.

[29] Scarborough, *Aëtius of Amida*, p. 38; J. Scarborough, *Theodora, Aetius of Amida, and Procopius*: *Some Possible Connections*, GRBS 53 (2013) p. 742-762.

basis of what he wrote, it is impossible to envisage the role his personal religiousness influenced the manner he approached medicine. Aëtius' interest in body care products becomes particularly evident in Book VIII, where we can find, for instance, a collection of recipes for agents used to wash the body, including a chapter entitled "Σμήγματα προσώπου καὶ στιλβώματα" (face cleansing and brightening agents)[30].

The titles of some recipes, such as "σμῆγμα Κλεοπάτρας βασιλίσσης πολυτελὲς εὐῶδες" (Queen Cleopatra's luxury fragrant cleanser)[31] and "σάπων ᾧ ἐχρήσατο Πελαγία πατρικία πρὸς τὸ λαμπρύναι τὸ πρόσωπον" (soap used by Patrician Pelagia to brighten her facial complexion)[32], indicate that they were aimed at wealthy people. Indeed, the former suggests that the user of the product, or perhaps even the author of its formula, was the Queen of Egypt – Cleopatra VII (1st c. BC)[33]. The latter refers to a female patrician, i.e., a representative of a higher social class[34]. The high economic status of the target customers also appears to be reflected in the lists of ingredients used in the prescriptions. The κόμμι[35] and

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[30] Aëtius Amidenus, *Iatricorum libri* VIII 6, 1-90. On the subject – Buzzi, *L'igiene*, p. 116-119.

[31] Aëtius Amidenus, *Iatricorum libri* VIII 6, 31-34.

[32] Aëtius Amidenus, *Iatricorum libri* VIII 6, 47-62.

[33] She was said to be the author of a treatise devoted to cosmetology – M. de Nardis, *Kleopatra (Queen of Egypt, 51–30 BCE)*, in: *The Encyclopedia of Ancient Natural Scientists. The Greek Tradition and its Many Heirs*, ed. P.T. Keyser – G. Irby-Massie, London – New York 2008, p. 482; L. Totelin, *The Third Way. Galen, Pseudo-Galen, Metrodora, Cleopatra and the Gynaecological Pharmacology of Byzantium*, in: *Collecting Recipes. Byzantine and Jewish Pharmacology in Dialogue*, ed. L. Lehmhaus – M. Martelli, Boston – Berlin 2017, p. 114-118.

[34] It is possible that Pelagia from the title of the formula was a barbarian woman, most probably from the Visigothic tribe, married to famous Roman generals of the 5th c. AD, first to Bonifatius and then to Aëtius – *The Prosopography of the Later Roman Empire*, v. 2: *A.D. 395–527*, ed. A.H.M. Jones – J.R. Martindale – J. Morris, Cambridge – London – New York – New Rochelle – Melbourne – Sydney 1980, p. 856-857. Another conclusion – Buzzi, Calà, *Le ricette*, p. 141; Calá, *Some Cosmetic Recipes*, p. 13.

[35] Plinius, *Historia naturalis* XIII 66, 1-67, 8 (Egypt as the country of origin of the best variety of the *cummi* resin – XIII 66, 1). From Dioscorides also we learn that the resin was obtained from acacia native to Egypt (*De materia medica* I 101, 1, 1-3, 9 [Egypt – I 101, 1, 1; κόμμι – I 101, 1, 7]). The acacia mentioned by the author is identified as *Acacia vera* and its resin nowadays is called Arabic gum – E. Lev – Z. Amar, *Practical Materia Medica of the Medieval Eastern Mediterranean According to the Cairo Genizah*, Leiden – Boston 2008, p. 180-182. In antiquity the resin cost 3 *denarii* per pound – Plinius, *Historia naturalis* XIII 66, 3. Since it was cheaper and more common than such exotic resins as

ἀμμωνιακόν[36] resins included in the formulas originated from Africa, which was also true about the castor bean (*Ricinus communis* L.)[37]. The fruit of the *balanites aegyptiaca* tree (μυροβάλανος)[38] was supplied from Africa but also from Arabia, while the latter was the only region from which myrrh[39], frankincense[40] and camel grass[41] were imported. Moreover, the ancients believed that the latter region provided *cinnamomum cas-*

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frankincense or myrrh it was often used to counterfeit these substances – Lev – Amar, *Practical Materia Medica*, p. 181-182.

[36] Plinius, *Historia naturalis* XII 107, 1-10 (Africa – XI 107, 2); Dioscurides, *De materia medica* II 84, 1, 1-3, 6 (Libya – III 84, 1, 1-2; III 84, 1, 7). Pliny (*Historia naturalis* XII 107, 10) noted that a pound of resin cost 40 asses. According to the Diocletian's edict, a *libra* (0.327 litres) of resin cost 200 *denarii* – *Edictum Diocletiani* 36, 59. On the resin – Lev – Amar, *Practical Materia Medica*, p. 333-334.

[37] Plinius, *Historia naturalis* XV 25, 1-26, 1 (castor bean as a plant common in Egypt – XV 25, 1-2; XV 25, 7). He noted that the plant was also known in Spain (*Historia naturalis* XV 25, 3). However, since Dioscorides mentioned that castor oil was used in great abundance in Egypt (*De materia medica* I 32, 1, 1-2, 11 [the analysed passage – I 32, 2, 1-2]), we may conclude that this was where the plant originated and was most common. On castor oil – W.R. Dawson, *Studies in Medical History*: *(a) The Origin of the Herbal. (b) Castor-oil in Antiquity*, "Aegyptus" 10 (1929) p. 57-72.

[38] Plinius, *Historia naturalis* XII 100, 1-102, 7 (*Balanites aegyptiaca* as a tree growing in the Troglodytae country, the Thebaid, and Arabia – XII 100, 1). Dioscorides (*De materia medica* I 109, 2-3) links the origin of the tree with Arabia. On the aromatic – G. Donato – M. Seefried, *The Fragrant Past. Perfumes of Cleopatra and Julius Caesar. Emory University Museum of Art and Archaeology Atlanta, April 5 – June 25, 1989*, Roma 1989, p. 24.

[39] According to Pliny myrrh was native to Arabia and the Troglodytae country (*Historia naturalis* XII 66, 1-71, 6 [places of origin of myrrh – XII 66, 2-5]). Dioscorides identifies its origin with Arabia (*De materia medica* I 64, 1, 1-5, 9 [Arabia – I 64, 1, 1]). As we are informed by Pliny (*Historia naturalis* XII 70, 6-71, 1) the price of myrrh (depending on its variety) oscillated between 11 and 16 *denarii*, whereas a single grain of Troglodytic myrrh (which was said to be of the highest quality) cost as much as 16 and a half *denarii*. In the early 4th c., myrrh also remained an expensive import. According to the Diocletian's edict, a *libra* of myrrh oil (στακτή) cost 600 *denarii* (*Edictum Diocletiani* 36, 87), and a *libra* of Troglodytic myrrh – 400 *denarii* (*Edictum Diocletiani* 36, 104). On myrrh – J.-P. Brun – X. Fernandez, *Parfums antiques*: *de l'archéologue au chimiste*, Milano 2015, p. 165-167.

[40] On the substance see further section of this article.

[41] According to Dioscorides the best camel grass came from Nabataea (the northern part of the Arabian Peninsula) – Dioscurides, *De materia medica* I 17, 1, 1-2, 9 (Nabataea – I 17, 1, 2). According to the Diocletian's edict, a pound of camel grass cost 50 *denarii* – *Edictum Diocletiani* 36, 123. On camel grass – P. Faure, *Parfums et aromates de l'Antiquité*, Paris 1987, p. 62.

sia[42]. Asia exported costus[43], green cardamom[44], spikenard[45] (occasionally substituted with its European variety, i.e., Celtic spikenard)[46], the leaves

[42] Dioscurides, *De materia medica* I 13, 1, 1-2, 4 (Arabia – I 13, 1, 2). Today we know that the spice is native to Asia – A. Dalby, *Dangerous Tastes. The Story of Spices*, London 2002, p. 38-39. However, the evidence of Dioscorides has been recently made probable by Stephen G. Haw (*Cinnamon, Cassia, and Ancient Trade*, "Journal of Ancient History and Archaeology" 4 [2017], p. 5-18). Form Pliny (*Historia naturalis* XII 97, 7-8) we learn that the top-quality cassia-cinnamon could cost as much as 50 *denarii* per pound, while the same amount of lower-class product would be sold for 5 *denarii*. In centuries to come, the price of cassia-cinnamon remained high, since – in accordance with Diocletian's edict – a pound of the product cost 120 *denarii* – *Edictum Diocletiani* 36, 51. A pound of cassia bark was sold for 125 *denarii* – *Edictum Diocletiani* 36, 52. On cassia-cinnamon – G. Squillace, *Le lacrime di Mirra. Miti e luoghi dei profumi nel mondo antico*, Bologna 2015, p. 135-138.

[43] According to Pliny (*Historia naturalis* XII 41, 5-8) the plant originated in India. However, Dioscorides mentioned also other regions where the plant was known (*De materia medica* I 16, 1, 1-2, 11 [different varieties of costus obtained from Arabia, India and Syria – I 16, 1, 1-4]). Nowadays we know that native place of origin of costus is Kashmir – Dalby, *Dangerous Tastes*, p. 85. One pound of top-quality product cost 5 and half *denarii* – Plinius, *Historia naturalis* XII 41, 7-8. On costus – Donato – Seefried, *The Fragrant Past*, p. 29-30.

[44] Plinius, *Historia naturalis* XII 50, 1-8 (green cardamom as a spice obtained from Arabia – XII 50, 2; Media – XII 50, 7). Dioscorides noted that green cardamom grew in India and Arabia. He also mentioned that its best variety was brought from Commagene, Armenia, and Bosphorus (*De materia medica* I 6, 1, 1-13 [the analysed passage – I 6, 1, 1-3]). Today we know that the plant is native to southern India and Sri Lanka – Dalby, *Dangerous Tastes*, p. 104. Pliny (*Historia naturalis* XII 50, 7-8) reported that a pound of best cardamom would cost 3 *denarii*. On green cardamom – Brun – Fernandez, *Parfums antiques*, p. 151-152.

[45] Plinius, *Historia naturalis* XII 42, 1-46, 6 (spikenard as a substance obtained from India – XII 42, 6; Syria – XII, 45, 2); Dioscurides, *De materia medica* I 7, 1, 1-4, 9 (India and Syria – I 7, 1, 1-4). Pliny (*Historia naturalis* XII 43, 7-44, 4) accounts that a pound of spikes of nard could cost as much as 100 *denarii*, while the most valued type of leaves cost 75 *denarii*. Although we do not know the price of nard from Diocletian's edict, we know that a *libra* of nard oil was sold for 75 *denarii* – *Edictum Diocletiani*, 36, 98. On spikenard – M. Kokoszko, *Nard (νάρδος; Nardostachys jatamansi [D. Don] DC) w wybranych źródłach greckich antyku i Bizancjum*, in: *Lek roślinny. Rośliny w lecznictwie, w środowisku naturalnym i krajobrazie kulturowym*, ed. B. Płonka-Syroka – A. Syroka, Wrocław 2017, p. 31-51.

[46] Plinius, *Historia naturalis* XII 45, 2; Dioscurides, *De materia medica* I 8, 1, 1-3, 6. According to Pliny (*Historia naturalis* XII 46, 1) Celtic spikenard cost 3 *denarii*.

of Nepal cardamom[47], and storax[48]. To complete the list, one must mention the substances naturally occurring in the Mediterranean, but available only locally, or whose local varieties were only considered the best. The former can be illustrated with the example of mastic, which was produced exclusively in Chios[49], while the latter is represented by the iris; although it was ubiquitous throughout the Mediterranean basin, its most valued varieties were those from Illyria and Macedonia[50]. The common feature of the majority[51] of the aforementioned substances was their distinctive

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[47] Plinius, *Historia naturalis* XII 48, 1-49, 7 (India – XII 48, 1; Armenia – XII 49, 2; Media and Pontus – XII 49, 3); Dioscurides, *De materia medica* I 15, 1, 1-2, 13 (Armenia – I 15, 1, 3; Media – I 15, 1, 5; Pontus – I 15, 1, 8). Modern research prove that Nepal cardamom originated in Nepal and southern Himalaya – Dalby, *Dangerous Tastes*, p. 103. From Pliny (*Historia naturalis* XII 49, 1-2) we learn that the price of Nepal cardamom oscillated between 48 and 60 *denarii* per pound. On Nepal cardamom – Lev – Amar, *Practical Materia Medica*, p. 100-102.

[48] Plinius, *Historia naturalis* XII 124, 1-126, 1 (Syria as the place of origin of storax – XII 124, 1-3 [the most valued storax obtained in Mount Amanus – XII 125, 3]). Pliny noted that the resin was also obtained in Pisidia, Side, Cyprus, Cilicia, Crete (*Historia naturalis* XII 125, 2) and Pamphylia (*Historia naturalis* XII 126, 1). Also see Dioscurides, *De materia medica* I 66, 1, 1-3, 9 (Syrian city of Gabala, Pisidia and Cilicia – I 66, 1, 5). According to Andrew Dalby storax was native to Syria. It was also known in Egypt – Dalby, *Dangerous Tastes*, p. 137. A top-quality product cost 17 *denarii* – Plinius, *Historia naturalis* XII 125, 7. In the 4th c. AD a *libra* of storax from Cilicia cost 500 *denarii* – *Edictum Diocletiani* 36, 57. The same amount of the product imported from Antioch in Syria was worth 200 *denarii* – *Edictum Diocletiani* 36, 58. On storax – S. Amigues, *Le styrax et ses usages antiques*, "Journal des Savants" 2 (2007) p. 261-318.

[49] Although Pliny noted that the resin was native to India, Arabia and Pontus, he emphasised that its best variety was brought from Chios (*Historia naturalis* XII 72, 1-10 [India and Arabia – XII 72, 2; Pontus – XII 72, 7; Chios – XII 72, 8]). Chios is referred to by Dioscorides (*De materia medica* I 70, 3, 1-11 [Chios – I 70, 3, 7–8]). Form Pliny (*Historia naturalis* XII 72, 8-9) we learn that the price of Chios mastic (depending on its quality) oscillated between 2 and 10 *denarii*. According to Diocletian's edict a *libra* of white mastic of Chios cost 175 *denarii* (*Edictum Diocletiani* 36, 63), while a *libra* of black mastic, 24 *denarii* (*Edictum Diocletiani* 36, 64). On mastic – P. Freedman, *Mastic: a Mediterranean Luxury Product*, "Mediterranean Historical Review" 26 (2011) p. 99-113.

[50] Plinius, *Historia naturalis* XXI 40, 1-42, 9 (Illyria and Macedonia – XXI 40, 5-41, 1); Dioscurides, *De materia medica* I 1, 1, 1-2, 7 (Illyria and Macedonia – I 1, 1, 7). From Diocletian's edict, we know that a *libra* of iris oil cost 30 *denarii* (*Edictum Diocletiani* 36, 92). On iris – Brun – Fernandez, *Parfums antiques*, p. 161-163.

[51] Our source analysis proves that only the aroma of ἀμμωνιακόν and castor bean was not *expressis verbis* described as pleasant. However, Dioscorides (*De materia medica* III 84, 1, 5-6) stated that ἀμμωνιακόν was characteristic of s smell similar to that of castor,

aroma[52], which – at that time – was most likely identified with luxurious exoticness.

It seems that the latter effect was most easily obtained by applying aromatic resins, since the analysis of the recipes mentioned by Aëtius of Amida indicates that the vast majority of them required the use of such substances[53]. Even though all of these aromatics deserve to be scrutinised, a comprehensive study devoted to each individually is impossible within one paper. Therefore, this article will focus exclusively on body care products manufactured with frankincense[54], because they can perfectly show what was the nature of cleansers described by Aëtius of Amida and define the clientele they were targeted at. As for the resin itself, is was thought to be a healing substance (having second-degree warming and first-degree siccative effects[55] along with astringency[56]. It was described in detail by Pliny (1st c. AD) and Dioscorides of Anazarbus (1st c. AD)[57], who men-

using the verb καστορίζω thereby implying that the scent was pleasant. On the meaning of καστορίζω – Dioscurides, *De materia medica* II 8, 1, 6-7. As for castor bean Herodotous (*Historiae* II 94, 1-95) defined smell of castor bean oil as "heavy" (βαρύς). In turn, κόμμι resin was classified by Theophrastus of Eressus (*De causis plantarum* IX 1, 3, 3) as a substance of no distinctive smell.

[52] To prove the thesis one can refer to the following examples: Dioscurides, *De materia medica* I 34, 1, 1-4 (fruit of the *balanites aegyptiaca* tree used for the purpose of preparing an essential oil called βαλάνινον); I 1, 1, 5; I, 1, 1, 9; I 1, 1, 13 (iris); I 6, 1, 4 (green cardamom); I 7, 1, 5-6 (spikenard); I 13, 1, 6 (*cinnamomum cassia*); I 15, 1, 4 (Nepal cardamom); I 16, 1, 2 (costus); I 17, 1, 6 (camel grass); I 64, 3, 3 (myrrh); I 66, 1, 3 (storax); I 70, 3, 9-10 (mastic).

[53] Except for three formulas – Aëtius Amidenus, *Iatricorum libri* VIII 6, 17-22; VIII 6, 23-30; VIII 6, 79-84.

[54] For the role the aromatic played both in ancient cult as well as medicine – S. Ashbrook Harvey, *Scenting Salvation*. *Ancient Christianity and the Olfactory Imagination*, Berkeley – Los Angeles – London 2006, p. 34.

[55] Aëtius Amidenus, *Iatricorum libri* I 252, 1-10. In this extract, we can distinguish a description of the curative properties of the bark of frankincense trees (I 252, 3-10).

[56] Aëtius Amidenus, *Iatricorum libri* I 252, 1-3. The author based his teachings on frankincense and other products obtained from frankincense trees primarily on Galen's findings – Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 60, 1, 1-18, v. 12; 60, 19-61, 8, v. 12; 61, 9-62, 11, v. 12. On frankincense in ancient and modern *materia medica* – M. Kokoszko – Z. Rzeźnicka, *Kadzidło i inne pożytki z drzew rodzaju kadzidła (Boswellia, Roxburgh ex Colebrooke). Świadectwo wybranych źródeł medycznych*, in: *Lek roślinny. Badania nad leczniczymi i toksycznymi właściwościami roślin – historia i współczesność*, ed. B. Płonka-Syroka – A. Syroka, Wrocław 2018, p. 15-30.

[57] Plinius, *Historia naturalis* XII 51, 4-65, 10; Dioscurides, *De materia medica* I 68, 1, 1-8, 10. Dioscurides' findings were repeated by Oribasius – *Collectiones med-*

tion its Arab origins[58]. A pound of frankincense from the first, second and third class cost six, five and three *denarii* respectively[59]. Both Pliny and Dioscorides mention that frankincense was counterfeited[60].

In the analysed chapter of *Iatricorum libri*, we encounter frankincense in Aëtius' recipe for "σμῆγμα λαμπρυντικὸν προσώπου" (face brightening cleanser). It was made by mixing four drachms[61] of frankincense, saltpetre and κόμμι resin respectively, forty peeled almonds, twenty-four drachms of durum wheat flour, and twelve drachms of broad bean flour. The ingredients were blended with egg white, and the resultant pulp was formed into pills. Before application (which could take place, for instance, at home or during a visit to a bath-house), they were macerated with water[62].

Another product was called "νίμμα προσώπου" (facial cleanser). It was known for its effectiveness, and its application was expected to make the facial skin brighter, springier and smoother (since it reduced its roughness). The author adds that it was helpful in the therapy of early elephantiasis, when it would be applied to the whole body, together with other preparations. The product consisted of one ounce of mastic, frankincense, ἀμμωνιακόν resin, and iris respectively, and sixteen ounces of tragacanth, nine ounces of juice made from unripe grapes, and ten ounces of melon seeds with the moist inner parts, twenty-nine egg whites, and five xestae[63] of durum wheat flour. The dry ingredients were pounded and then mixed with the moist ones. The resultant mass was shaped into flattened, presum-

icae XI λ, 7, 1-22 (resin); XI λ, 7, 22-33 (bark); XI λ, 7, 33-48 (soot). On frankincense – L.J. Musselman, *A Dictionary of Bible Plants* Cambridge – New York 2012, p. 59-61; Brun – Fernandez, *Parfums antiques*, p. 155-159.

[58] Dioscurides, *De materia medica* I 68, 1, 1; Plinius, *Historia naturalis* XII 51, 1-4.

[59] Plinius, *Historia naturalis* XII 65, 5-6. On frankincense's prices – N. Groom, *Frankincense and Myrrh: A Study of the Arabian Incense Trade*, London – New York 1981, p. 154-156. Although we do not possess any direct data concerning the price of frankincense in Aëtius of Amida's lifetime, we might suppose that it was high on the basis of an analogy to the cost of another precious substance imported from Arabia, i.e. myrrh, which, in the chapter devoted to hair thinning preparations (*Iatricorum libri* VI 65, 1-21), was *expessis verbis* said by the author to be an aromatic for the rich (*Iatricorum libri* VI 65, 15-18).

[60] Dioscurides, *De materia medica* I 68, 2, 2-6; Plinius, *Historia naturalis* XII 65, 6-10. Dioscurides also recounts that similar illegal practices regarded powdered frankincense called μάννα (*De materia medica* I 68, 6, 3-7), and the bark of frankincense trees (*De materia medica* I 68, 5, 1-7).

[61] Drachm = 4.32 grams.

[62] Aëtius Amidenus, *Iatricorum libri*, VIII, 6, 3-7 (frankincense – VIII, 6, 3).

[63] Xestes = 0.54 litres.

ably large pills – which the author calls small loaves (ἀρτίσκοι) – and left to dry. Next, the pills would be crumbled and sieved, and the ready-to-use powdered preparation was stored in a glass vessel[64].

The third recipe that involved the precious resin refers to the production of a reliable agent called "σάπων πρὸς μελανίας προσώπου" (σάπων removing dark discoloration of the face). The product was prepared by blending sixteen ounces of frankincense and one ounce – respectively – of meticulously washed white lead, litharge (repeatedly soaked in an infusion of white chick-peas placed in a sunny spot), freshly obtained starch, slivers of white marble, purified mastic, white saltpetre, and cuttlefish shells, as well as twelve ounces of a substance called "σάπων γαλλικός" and ten egg whites[65].

The last of the preparations that contained frankincense was made from eight drachms of the insides of castor bean seeds, eight drachms of dried peeled daffodil bulbs, four drachms of durum wheat flour, two drachms of frankincense, and two egg whites. Once ground, the ingredients were mixed with the egg whites, kneaded into a pliable mass, and formed into pills, which were left to dry in a shaded place. After maceration in water, the preparation was applied to the face and other parts of the body during visits to a bath-house[66].

We shall commence our analysis from the third of the aforementioned formulas. What distinguishes it from all other analysed σμήγματα is the added substance called "σάπων" ("γαλλικός")[67], which was also used in the two preceding recipes, i.e., in "σάπων ᾧ ἐχρήσατο Πελαγία πατρικία πρὸς τὸ λαμπρύναι τὸ πρόσωπον"[68], and "σάπων· ἄλλο ἐν λουτρῷ" (soap used in the bath)[69]. As for the word "σάπων", its affinity with the group of cleansing agents is confirmed by an excerpt from *Collectiones medicae* by Oribasius (4th c. AD), where the author quotes the extracts from writings by Philumenus (2nd c. AD), who classifies σάπων as one of the cleansing preparations termed generally "σμήγματα"[70].

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64 Aëtius Amidenus, *Iatricorum libri* VIII 6, 8-16 (frankincense – VIII 6 11).

65 Aëtius Amidenus, *Iatricorum libri* VIII 6, 63-68 (frankincense – VIII 6, 63).

66 Aëtius Amidenus, *Iatricorum libri*, VIII 6, 75-79 (frankincense – VIII 6, 77).

67 See Aëtius Amidenus, *Iatricorum libri* VIII 6, 47-58 (Gallic soap – VIII 6, 48); VIII 6, 59-62 (Gallic soap – VIII 6, 59); VIII 6, 63-68 (Gallic soap – VIII 6, 67).

68 Aëtius Amidenus, *Iatricorum libri* VIII 6, 47-58.

69 Aëtius Amidenus, *Iatricorum libri* VIII 6, 59-62.

70 Oribasius, *Collectiones medicae* XLV 29, 1, 1-79, 4 (σάπων – XLV 29, 59, 1-60, 1).

The term "σάπων" is translated into English as "soap"[71], and the accompanying epithet implies that the substance came from Gaul, which is confirmed in *Naturalis historia* by Pliny, who refers to it in Latin as "sapo" and explains the Gauls used it to dye their hair a reddish colour, i.e., to brighten it. According to Pliny's narrative, this was a compound preparation made from tallow and ashes – ideally goat tallow and beech ashes. The author states that the finished product could be of a hard or fluid consistency, and that soap was also known among the Germanic peoples, whose men would use it more often than women[72]. The substance is also mentioned by Aretaeus of Cappadocia (2nd c. AD) in his work on chronic diseases. He defines Gallic soap as pills which work like natron does, and that is why they cleanse both linen as well as the body[73]. A laconic remark on soap can also be found in *De methodo medendi* by Galen of Pergamum, who – following his line of work – focuses on those properties of the substance that could interest people proficient in *ars medica*. Thus, he declares that the agent known as σάπων offers strong depurative effects[74]. Interestingly, there is neither a description of soap within *De materia medica* by Dioscorides nor in other deliberations on simple medications conducted by later prominent physicians, which may indicate that the substance was used in medicine only to a limited degree, and, on the other hand, more commonly applied in cosmetology. The hypothesis is borne out by the manner in which soap was used within the preserved recipes, and specifically, by its exclusive application in preparations which cleansed the skin externally and were never meant to be swallowed[75].

On the basis of the quoted accounts, we can assume that soap was not well known in the Mediterranean world. Pliny, Aretaeus and Galen allude to it in a manner that suggests that their readers did not have the opportunity to encounter the product in everyday life. The former two mention soap only as a curiosity, describing it as a substance used in the territories lying far away from centres of the Greco-Roman civilization, to which it was apparently still imported. Meanwhile, the passage from *De metho-*

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[71] On soap in antiquity – K.L. Konkol – S.C. Rasmussen, *An Ancient Cleanser: Soap Production and Use in Antiquity*, in: *Chemical Technology in Antiquity*, ed. S.C. Rasmussen, Washington 2015, p. 245-266.

[72] Plinius, *Historia naturalis* XXVIII 191, 5-8.

[73] Aretaeus, *De curatione diuturnorum morborum* II 13, 7, 3-6.

[74] Galenus, *De methodo medendi* 569, 13-14, v. 10.

[75] Although Galen recommended its use in medicaments for treating ailments of the oral cavity, these substances were never meant to reach the digestive system. See Galenus, *De compositione medicaentorum secundum locos* 586, 15-587, 2, v. 12.

do medendi allows us to presume that in Galen's times, soap was used in medical circles as one of the numerous depurative agents, while the term "ὁ σάπων ὀνομαζόμενος (the so-called soap)" indicates that it was not a local preparation, but a rarely imported commodity, and thus unknown to the majority of society. The latter supposition is also confirmed by the fact that Galen specified only five recipes in which the substance was to be used[76]. Anyway, the fact that the product originated from Gaul, or even Germania, implies that it belonged to the class of relatively expensive substances because of the lack of local production and high import costs.

Let us return now to the recipe for "σάπων πρὸς μελανίας προσώπου". The soap combined the functions of a cleansing and therapeutic agent, as, on the one hand, it was meant to loosen particles of dirt accumulated on the surface of the skin, and on the other hand, it removed hyperpigmentation. Both functions are perfectly reflected in its components, which include such chemical depurative ingredients as σάπων γαλλικός, saltpetre (ἀφρόνιτρον)[77], and litharge (λιθάργυρος)[78], as well as mechanical cleansers (cuttlefish shells)[79], and substances able to cover discolorations (slivers of white marble[80] and starch [the latter additionally smoothens the skin by reducing its roughness[81]]). Furthermore, litharge[82] as well as

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[76] Galenus, *De compositione medicamentorum secundum locos* 586, 13-17, v. 12 (σάπων – 586, 15, v. 12); 586, 17-587, 2, v. 12 (σάπων – 586, 17, v. 12); 589, 3-10, v. 12 (σάπων – 589, 5-6, v. 12); 826, 6-9, v. 12 (σάπων – 826, 6, v. 12); 827, 7-16, v. 12 (σάπων – 827, 7, v. 12).

[77] Dioscurides, *De materia medica* V 113, 1, 1-4, 7 (cleansing properties – V 113, 3, 2-3); Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 212, 10-213, 8, v. 12 (cleansing properties – 212, 15-17, v. 12); Oribasius, *Collectiones medicae* XV 1:27, 6, 1-7, 6 (cleansing properties – XV 1:27, 6, 4-7, 1; XV 1:27, 7, 4); Aëtius Amidenus, *Iatricorum libri* II 50, 1-10 (cleansing properties – II 50, 7-8); Paulus Aegineta, *Epitome* VII 3, 1, 345-347 (cleansing properties – VII 3, 1, 345-346).

[78] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 243, 17-244, 10, v. 12 (mild cleansing properties – 224, 16, v. 12); Oribasius, *Collectiones medicae* XIV 48, 1, 1-42 (mild cleansing properties – XIV 48, 1, 39-40); Aëtius Amidenus, *Iatricorum libri* II 60, 1-4 (mild cleansing properties – II 60, 2-3); Paulus Aegineta, *Epitome* VII 3, 11, 81-84 (cleansing properties – VII 3, 11, 83).

[79] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 347, 10-348, 6, v. 12 (cleansing properties of cuttlefish shell – 347, 12, v. 12).

[80] Most likely, the product showed some peeling properties.

[81] Galenus, *De alimentorum facultatibus* 500, 5-10, v. 6 (smoothening properties of starch – 500, 5-6, v. 6).

[82] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 224, 15-16, v. 12; XIII λ, 1, 1-31 (astringent properties – XIII λ, 1, 6); Paulus Aegineta, *Epitome* VII 3, 11, 83.

mastic[83] and frankincense[84], due to their astringent properties, minimised skin pores, and thus prevented the penetration of dirt particles into the skin. Moreover, mastic softened the skin[85] and saltpetre[86] as well as white lead (ψιμύθιον)[87] soothed irritations caused by chemical substances and mechanical cleansers. Additionally, white lead, owing to its antiperspirant properties helped to remove the foul smell[88], and the body was provided with a distinctive scent by mastic and frankincense.

We shall now focus on the remaining three σμήγματα. Since none contained an agent reacting with fat (as the Gallic soap did), and each included a class of pulverised dried-plant substances, we may assume that it was the latter that loosened dirt from the surface of the skin, and did so not by chemical reactions, but mechanically. Thus, their effect was based primarily on the presence of an abrasive constituent, which makes them resemble modern peelings/scrubs. Interestingly, the substances that must have offered a similar effect (ground oyster shells, crumbled cuttlefish shells, and slivers of marble) can also be found, as we have already demonstrated, in recipes that involve the addition of soap, which suggests that abrasive substances were included to enhance the effectiveness of chemical cleansers. As a result, one can conclude that it was the mechanical cleansers that were the basis of all cleaning agents and that the chemical ones were only supposed to support the action of the former.

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[83] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 68, 14-69, 7, v. 12 (astringent properties – 68, 16, v. 12); Oribasius, *Collectiones medicae* XV 1:12, 9, 1-10, 1 (astringent properties – XV 1:12, 9, 1); Aëtius Amidenus, *Iatricorum libri* I 270, 1-6 (astringent properties – I 270, 2); Paulus Aegineta, *Epitome* VII 3, 12, 22-26 (astringent properties – VII 3, 12, 23).

[84] See note 56.

[85] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 68, 16, v. 12; Oribasius, *Collectiones medicae* XV 1:12, 9, 1; Aëtius Amidenus, *Iatricorum libri* I 270, 2; Paulus Aegineta, *Epitome* VII, 3, 12, 23-24.

[86] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 212, 17, v. 12 (saltpetre as an itch soother).

[87] Aëtius Amidenus, *Iatricorum libri* II 203, 1-13 (strong cooling properties of white lead – II 203, 8-9).

[88] White lead was classified by Antyllus, and later by Oribasius (*Collectiones medicae* X 19, v. 1) as a διάπασμα (Oribasius, *Collectiones medicae* X 33, 1, 1), i.e. a substance used as an antiperspirant (Oribasius, *Collectiones medicae* X 31, 2, 1-2) or a deodorant (Oribasius, Collectiones medicae X 31, 1, 4-5). It blocked excessive perspiration, and thus eliminated unpleasant body odour.

It seems that within the analysed recipes the basic abrasive constituent was wheat flour. Nevertheless, we presume that any type of flour was considered a cleansing substance. According to Galen, the most effective was broad bean flour. The physician recounts that slave traders (for the sake of hygienic procedures performed on their merchandise) and women (poor ones) used it on a daily basis to wash the body, just as others opted for saltpetre or natron[89]. Meanwhile, from the formula for a beauty product called "στίλβωμα προσώπου" (face brightening cleanser)[90] it can be concluded that a similar effect was offered by flours made from such grains as lupine, vetch, chickpea and barley. Another substance that seems to have had peeling properties was crumbled almonds, which additionally would give to the preparation a pleasant scent, while the fat contained in almonds worked as an emollient. What is more, ancient and Byzantine physicians emphasised almonds' cleansing properties[91] and recommended their use in brightening freckles[92]. Both properties were shared by castor beans[93], which additionally, because of their oiliness[94], were probably used in this case as a *sui generis* emollient[95]. Moreover, non-mechanical cleansing effect was offered by melon seeds with its moist inner parts[96], narcis-

[89] Galenus, *De alimentorum facultatibus* 529, 8-532, 3, v. 6 (the analysed extract – 530, 7-10, v. 6).

[90] On the cosmetic, see further part of the article.

[91] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 827, 6-828, 11, v. 11 (cleansing properties – 827, 15-16, v. 11); Oribasius, *Collectiones medicae* I 56, 1, 1-2, 3 (cleansing properties – I 56, 1, 1); Paulus Aegineta, *Epitome* VII 3, 1, 198-201 (cleansing properties – VII 3, 1, 199-200).

[92] Dioscurides, *De materia medica* I 123, 1, 1-2, 10 (brightening freckles – I 123, 1, 1-3); Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 827, 12, v. 11; Aëtius Amidenus, *Iatricorum libri* I 31, 1-8 (brightening freckles – I 31, 2).

[93] Dioscurides, *De materia medica* IV 161, 1, 1-2, 8 (brightening freckles – IV 161, 2, 5); Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 26, 3-7, v. 12 (cleansing properties – 26, 3-4, v. 12); Oribasius, *Collectiones medicae* XV 1:10, 46, 1-47, 1 (cleansing properties – XV 1:10, 46); Aëtius Amidenus, *Iatricorum libri* I 101, 1-6 (brightening freckles – I 101, 4); Paulus Aegineta, *Epitome* VII 3, 10, 165-167 (cleansing properties – VII 3, 10, 165).

[94] On producing oil from castor beans – Dioscurides, *De materia medica* IV 161, 1, 5-7.

[95] Herodotus, *Historiae* II 94, 1-2.

[96] Galenus, *De alimentorum facultatibus* 465, 15-466, 6, v. 6 (cleansing properties – 466, 1-2, v. 6); Oribasius, *Collectiones medicae* I 36, 1, 1-2, 6 (cleansing properties – I 36, 1, 2); Aëtius Amidenus, *Iatricorum libri* II 225, 1-20 (cleansing properties of melon – II 225, 17). Although Dioscorides does not formulate any direct mention about cleansing

sus bulbs[97] and saltpetre. In the analysed recipes we can also specify a group of astringent substances such as juice of unripe grapes[98], mastic and frankincense. One should also mention that mastic as well as ἀμμωνιακόν resin[99] worked as softeners, while other two resins mentioned in the recipes, i.e. κομμι[100] and tragacanth[101] were applied due to their adhering properties, which helped to sooth the skin irritation caused by the abrasive ingredients. Finally, irises as well as aromatic resins and narcissus gave the preparations a beautiful fragrance.

As we learn from remarks included in two of the analysed formulas, the described peelings/scrubs would customarily be used in a bathhouse, where they were softened with water to reach the consistency of a paste, and then they were carefully rubbed into the face or other body parts, until all the dirt was removed. Logic dictates that the skin would be rinsed after the treatment, as indicated by a remark found in the formula for "σμῆγμα ἐνεργὲς εὐῶδες" (effective scented cleanser), which we can come across in the same chapter. The prescription reads

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properties of melon, he must have shared an opinion similar to the above-specified because he recommends facial cleanser based on melon juice and seeds mixed with wheat flour – *De materia medica* II 135, 2, 4-5.

[97] Dioscurides, *De materia medica* IV 158, 1, 1-2, 9 (cleansing properties – IV 158, 2, 5); Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 85, 17-86, 2 v. 12 (cleansing properties – 86, 2, v. 12); Oribasius, *Collectiones medicae* XIV 48, 1, 1-42 (moderate cleansing properties of narcissus – XIV 48, 23); Aëtius Amidenus, *Iatricorum libri* I 293, 1-3 (cleansing properties – I 293, 3); Paulus Aegineta, *Epitome* VII 3, 13, 22-24 (cleansing properties – VII 3, 13, 24).

[98] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 160, 14-16, v. 12; Oribasius, *Collectiones medicae* XII o, 3, 1-7 (astringent properties – XII o, 3, 6); Paulus Aegineta, *Epitome* VII 3, 15, 21-23 (astringent properties – VII 3, 15, 21).

[99] Dioscurides, *De materia medica* III 84, 2, 1; Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 828, 12-15, v. 11 (softening properties – 828, 13, v. 11); Aëtius Amidenus, *Iatricorum libri* I 32, 1-3 (softening properties – I 32, 1); Paulus Aegineta, *Epitome* VII 3, 1, 179-180 (softening properties – VII 3, 1, 179).

[100] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 34, 14-35, 2, v. 12 (adhering properties – 35, 1-2, v. 12); Oribasius, *Collectiones medicae* XV 1:10, 60, 1-61, 1 (adhering properties – XV 1:10, 60, 1); Aëtius Amidenus, *Iatricorum libri* I 214, 1-2 (adhering properties – I 214, 1); Paulus Aegineta, *Epitome* VII 3, 10, 245-246.

[101] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 143, 6-8, v. 12 (adhering properties – 143, 7, v. 12); Aëtius Amidenus, *Iatricorum libri* I 392, 1-3 (adhering properties – I 392, 2); Paulus Aegineta, *Epitome* VII 3, 19, 56 (properties of tragacanth are analogous to those typical for κομμι resin).

that once mixed with water, the preparation was left on the skin for an hour, and then washed off with cool water[102].

The analysed texts indicate that cleansing preparations were most frequently given the shape of a pill. Although, in *Iatricorum libri*, there is no information regarding the rationale behind this preferred form, one may conjecture that the popularity of the pill-shaped agents stemmed from its effectiveness in protecting preparations against the impact of atmospheric conditions, and thereby its capacity of extending the use-by date of such products, since, when the agent was formed into a pill, it was only its outer layer that was exposed to atmospheric conditions. It is also worth adding that the exposition would have been reduced to a minimum if pills were spherical in shape, as the surface-to-mass ratio of a sphere is most favourable, if one wants to squeeze a maximum weight of mass into the shape of a minimum surface. The accuracy of this assumption is also confirmed by the fact that ἀρτίσκοι-shaped products (which were rounded in diameter and flattened in cross-section), in turn, were not stored for long periods of time. Their shape – namely, a relatively large surface in relation to the mass of the product – made the preparation lose its properties more quickly. Therefore, ἀρτίσκοι were pulverised immediately after desiccation, and the resultant powder was poured into a glass container, which presumably was tightly closed, protecting the contents against lumping and loss of aroma.

As indicated above, scent was the feature which distinguished cleaning products aimed at wealthy customers. It was reflected in the prescription titles, just like in the recipe for Cleopatra's σμῆγμα, or within the title of the formula for "σμῆγμα ἐνεργὲς εὐῶδες"[103] and "σμῆγμα ὅλου τοῦ σώματος εὐῶδες πάνυ" (highly aromatic cleanser for the whole body)[104]. As we can conjecture, following the features attributed to them by the ancient theory of *materia medica*, aromatic substances were added not only for the sake of their aroma but also to increase the effectiveness of cosmetics.

Nevertheless, cosmetology did not focus exclusively on addressing the needs of the rich. Galen's remark on broad bean flour is not the only evidence of the existence of cleaning agents which could potentially be made available to a wider range of social strata. The analysed chapter also proves to cater for the poor, because it contains a formula based on a range of inexpensive products. The στίλβωμα (which was supposed to brighten

[102] Aëtius Amidenus, *Iatricorum libri* VIII 6, 35-38.
[103] Aëtius Amidenus, *Iatricorum libri* VIII 6, 35-38.
[104] Aëtius Amidenus, *Iatricorum libri* VIII 6, 84-90.

the skin of the face) was made from legume (vetch, broad bean, lupine and chickpea) and barley flours (half a *sextarius*[105] each), the same amount of narcissus bulbs, and one *sextarius* of durum wheat flour. All the ingredients were ground, sifted through the finest sieve, and then blended with egg white. The resultant mass was kneaded into pills and dried in a shaded place. Later, an appropriate number of pills were dissolved in water[106] and used during a bath. As explained in the text of the formula, the production technology of the discussed agent was analogical to the one used to manufacture more expensive preparations, as was the application method. The listed substances were available throughout the Mediterranean basin, and attributed with cleansing properties[107]. In order to fulfil the promise contained in its title, the preparation was enriched with warming substances[108], which dilated the blood vessels and led to blushing.

3. Conclusions

An attempt will now be made to summarize our deliberations. The presented passages unambiguously indicate that the inhabitants of the Mediterranean world attached great importance to personal hygiene in the era of antiquity and the early Middle Ages. In order to effectively cleanse the skin, they applied various cleaning agents, the majority of which worked as modern peelings, removing dirt by means of abrasive ingredients. Some worked in a way similar to the one modern soaps do. Application of the preparations most frequently took place in a bath-house, as indicated by source texts.

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[105] *Sextarius* = 546 milliliters.

[106] Aëtius Amidenus, *Iatricorum libri* VIII 6, 17-22.

[107] Dioscurides, *De materia medica* II 109, 1, 8-9 (lupine flour as a substance cleansing the complexion and eliminating lividity); Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 876, 12-877, 5, v. 11 (cleansing properties of the chickpea – 876, 18, v. 11); 91, 15-92, 2, v. 12 (cleansing and unblocking properties of vetch, 92, 1, v. 12). Galen attributed barley with some mildly cleansing properties. However, in the medical characteristics of the product, he added that when applied externally, it had an analogical effect to broad bean flour (*De simplicium medicamentorum temperamentis ac facultatibus* 44, 10-14, v. 12 [mildly cleansing properties and an analogy to broad bean flour – 44, 11-14, v. 12]). In the light of the information above, we may assume that barley flour was an effective cleaning agent.

[108] Galenus, *De simplicium medicamentorum temperamentis ac facultatibus* 877, 1, v. 11 (warming properties of the chickpea); 91, 16-17, v. 12 (warming properties of vetch [first degree]).

As their primary goal was to keep the surface of the body clean (and thereby healthy), the analysed agents should be classified as cosmetics, and not included into the category of commotics. Thus they appear to be morally acceptable, regardless of their users' religious convictions. On the other hand, ingredients used in the analysed formulas reflect social divisions. People of limited financial means would use commonly available substances. On the basis of the analysed texts, we may assume that although unsophisticated, such cleaning agents were considered equally effective, and at times, even attributed with some therapeutic action. Meanwhile, wealthier customers could afford to purchase cleansers which were effective and additionally provided with an exceptional fragrance.

Both classes of cleansing preparations were compiled from ingredients selected by design, i.e., in accordance with the description of their features preserved in the corpus of *materia medica*. Such a pattern of their employment means that ancient physicians followed an internally coherent theory, based on the principles developed by centuries-old practices. As far as Aëtius of Amida is concerned, he relied mostly on Galen's *materia medica*[109].

Last but not least, we can suggest a source of the cosmetology found in Book VIII of *Iatricorum libri*. There are some indications that Aëtius of Amida derived, at least, some of his knowledge from Κοσμητικά (*On Cosmetics*) by Titus Statilius Criton of Heraclea[110], which was the major compendium of theoretical knowledge, summarizing the ancient output in the realm of cosmetology. Although the work has not survived in its entirety, substantial parts of it were preserved in the writings of Galen

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[109] E. Gowling, *Aëtius' Extraction of Galenic Essence: A Comparison Between Book 1 of Aetius' Libri Medicinales and Galen's On Simple Medicines*, in: *Collecting Recipes. Byzantine and Jewish Pharmacology in Dialogue*, ed. L. Lehmhaus – M. Martelli, Boston – Berlin 2017, p. 83-101.

[110] On Criton – J. Scarborough, *Criton, Physician to Trajan: Historian and Pharmacist*, in: *The Craft of the Ancient Historian*: *Essays in Honor of Chester G. Starr*, ed. J.W. Eadie – J. Ober, Lanham 1985, p. 387-405; J. Scarborough – A. Touwaide, *Kritōn of Herakleia Salbakē, T. Statilius (80–120 CE)*, in: *The Encyclopedia of Ancient Natural Scientists. The Greek Tradition and its Many Heirs*, ed. P.T. Keyser – G. Irby-Massie, London – New York 2008, p. 494-495; Totelin, *The Third Way*, p. 113-114; Guardasole, *Galien de Pergame*, p. 31-50, especially 34, n. 26; Ph. Mudry, *Effacer tatouages et marques d'infamie*. *Quelques recettes de la médecine antique*, in: *Le teint de Phrynè Thérapeutique et cosmétique dans l'Antiquité*, ed. V. Boudon-Millot – M. Pardon-Labonnelie, Paris 2018, p. 177.

of Pergamum[111], Oribasius[112], Aëtius of Amida[113] and Paul of Aegina (7th c. AD)[114]. It is true that Aëtius of Amida did not refer to Criton as the author of recipes for σμήγματα, in Book VIII, he quoted him as the creator of a formula for a preparation used to remove lividity[115], referred to Criton's expertise in the seventh chapter[116] (on antiperspirants and deodorants), and mentioned him in chapters thirteen[117] (on excrescences, known as συκαί, i.e. figs), sixteen[118] (on lichenoid eruptions) and forty-nine[119] (on abscesses on tonsils). Therefore, Aëtius was undoubtedly familiar with Criton's output, which allows us to formulate a hypothesis that, at least, some of the formulas for σμήγματα analysed within this article might have originated from Book II of Κοσμητικά, where the author – as accounted by Galen – discussed "σμήγματα ὅλου τοῦ σώματος" (cleansers applied to the whole body)[120].

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[111] Galenus, *De compositione medicamentorum temperamentis ac facultatibus* 401, 4-402, 9, v. 12; 659, 13-660, 18, v. 12, etc.; Galenus, *De compositione medicamentorum per genera* 515, 13-517, 9, v. 13; 708, 13-716, 19, v. 13; 786, 15-787, 11, v. 13, etc.

[112] Oribasius, *Synopsis ad Eustathium filium* III 24, 1, 2, 1-5, 4.

[113] Aëtius Amidenus, *Iatricorum libri* VI 55, 50-55; VI 64, 1-23; VIII 2, 33-41, etc.

[114] Paulus Aegineta, *Epitome* III 1, 4, 1-7; IV 7, 1, 4-9, etc.

[115] Aëtius Amidenus, *Iatricorum libri* VIII 2, 33-41 (Criton – VIII 2, 33).

[116] Aëtius Amidenus, *Iatricorum libri* VIII 7, 1-44 (Criton – VIII 7, 1).

[117] Aëtius Amidenus, *Iatricorum libri* VIII 13, 1-33 (Criton – VIII 13, 11).

[118] Aëtius Amidenus, *Iatricorum libri* VIII 16, 1-17, 4 (Criton – VIII 16, 7).

[119] Aëtius Amidenus, *Iatricorum libri* VIII 49, 89-91 (Criton – VIII 49, 89).

[120] Galenus, *De compositione medicamentorum secundum locos* 446, 15, v. 10. The supposition can be confirmed by means of Paul of Aegina's writings, who preserved in his treatise two analogous prescriptions for σμήγματα, which he attributed to Criton (*Epitome* VII 13, 19, 1-8). It is crucial that both Paul's σμήγματα are prepared in the same way as the ones whose recipes were given by Aëtius, and they include the vast majority of components found in *Iatricorum libri* (especially – Paulus Aegineta, *Epitome* VII 13, 19, 6-8 and Aëtius Amidenus, *Iatricorum libri* VIII 6, 8-16). A version of the second formula belonging to Sub-chapter 19 also constitutes the contents of Sub-chapter 18. Accordingly, the latter is also connected with Criton's output, and testifies to popularity of his treatise in the early Byzantine period. On Paul of Aegina's use of Criton's writings – Guardasole, *Galien de Pergame*, p. 44-46.

On Frankincense-scented Soaps, Peelings and Cleansers or on Cosmetics and Commotics in Antiquity and Early Byzantium

(summary)

Cosmetology (τέχνη κοσμητική), i.e. a resource of means aimed at maintaining natural beauty of a human, was not frowned upon by the pagans nor by the Christians. What they disapproved of was commotic (κομμωτικὴ τέχνη), defined (by Galen, Clement of Alexandria, Gregory of Nyssa and Theodoret of Cyrus) as an art of changing the outward appearance to the detriment of nature and one's health. The present study has been designed to discuss select information, extant in Book VIII of *Iatricorum libri* by Aëtius of Amida, on what preparations were at disposal of the people of the Mediterranean who cared for their physical cleanliness (as well as health), regardless of their religious proclivities. It is focused on a number of prescriptions for face and body cleansers, though the analysed inventory has been limited to the ones including frankincense. The research material has turned out to be ample enough to draw conclusions on the ingredients used in such agents, their effectiveness, the form of the preparations, their application mode as well as on the addressees of the recipes. It has been also suggested that the formulas were compiled from the body of medical knowledge akin to what was collected by Titus Statilius Crito in his work *On cosmetics*.

Keywords: history of medical literature; history of patristic literature; history of ancient medicine; history of Byzantine medicine; cosmetology; cosmetics; frankincense; Aëtius of Amida

O mydłach, peelingach i innych środkach pielęgnacyjnych z dodatkiem kadzidła, czyli o kosmetykach i kommotykach w okresie starożytności i wczesnego Bizancjum

(streszczenie)

Kosmetologia (τέχνη κοσμητική), a więc zespół środków i procedur, które miały służyć utrzymaniu naturalnego piękna, była akceptowana zarówno przez pogan, jak i przez chrześcijan. Jedni i drudzy za to odrzucali kommotykę (κομμωτικὴ τέχνη), która była definiowana (przez Galena, Klemensa z Aleksandrii, Grzegorza z Nyssy i Teodoreta z Cyru) jako sztuka zmieniania własnego wygląd kosztem praw natury i zdrowia. Obecny artykuł stawia sobie za cel przeanalizowanie tych informacji zachowanych w księdze VIII *Iatricorum libri* autorstwa Aecjusza z Amidy, które pozwalają ustalić, jakie preparaty kosmetyczne był do dyspozycji członków społeczeństw śródziemnomorskich dbałych o swoją czystość i zdrowie, niezależnie od tego, jaką wiarę reprezentowali. Artykuł koncentruje się wyłącznie na grupie środków, która zawierały w sobie kadzidło. Materiał podlegający analizie pozwala ukazać funkcje substancji wchodzących w skład analizowanych kosmetyków, efektywność działania rzeczonych środków, formę przyjmowaną przez omawiane preparaty oraz adresatów zachowanych przepisów. Autorzy artykułu wysuwają hipotezę, że receptury zostały skomponowane w związku z zakresem wiedzy i umiejętności utrwalonych przez Tytusa Statiliusza Kritona w jego dziele *O kosmetykach*.

Słowa kluczowe: historia literatury medycznej; historia literatury patrystycznej; historia medycyny antycznej; historia medycyny bizantyńskiej; kosmetologia; kosmetyki; kadzidło; Aecjusz z Amidy

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