

# THE MEDICAL PRACTICE OF AMATUS LUSITANUS IN DUBROVNIK (1556-1558)

## a short reminder on the 445<sup>th</sup> anniversary of his arrival

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### SUMMARY/RESUMO

The year 2001 sees the 445th anniversary of Amatus Lusitanus' arrival in the Ragusan Republic (Dubrovnik), where he spent three years (1556-1558) practicing as a highly respected physician. One of his principal books, entitled *Curatium medicinalium centuriae septem* relates his experience in 700 case histories. The sixth part of the book contains descriptions of a 100 cases he treated as the principal physician of Dubrovnik. It gives splendid insight into the medical and cultural situation of Dubrovnik in the 16th century, as well as shedding light on therapeutic procedures and medications Amatus has been prescribing to his patients. The person and medical practice of Amatus Lusitanus in Dubrovnik is a valuable proof of cultural links between Portugal and Croatia, as parts of a wider Mediterranean civilisational sphere. The work of Amatus Lusitanus became a reference for all researchers of the Croatian medical heritage.

### AMATUS LUSITANUS EM DUBROVNIK (1556-1558)

No ano de 2001 comemora-se o 445º aniversário da chegada do eminente médico Amatus Lusitanus à República de Ragusa (Dubrovnik), onde passou três anos (1556-1558) a exercer clínica. Uma das suas principais obras, intitulada *Curatium medicinalium centuriae septem*, relata a sua vasta experiência clínica através da descrição de 700 casos. A sexta parte desta obra contém a descrição de 100 casos por ele tratados na sua qualidade de médico ao serviço da cidade-estado de Dubrovnik. Esta obra oferece uma excelente perspectiva da situação da medicina e da cultura em Dubrovnik, no século XVI, para além de clarificar os procedimentos terapêuticos e a medicação que Amatus prescrevia aos seus pacientes. A estada de Amatus Lusitanus em Dubrovnik e a actividade médica por ele aí desenvolvida constituem uma valiosa prova da existência de laços culturais que ligavam Portugal e a Croácia, no contexto civilizacional mais amplo dos povos da bacia mediterrânea. O trabalho de Amatus Lusitanus tornou-se uma referência incontornável para todos aqueles que se dedicam à investigação da herança médica croata.

The famous Portuguese physician of Jewish origin Amatus Lusitanus (João Rodriguez, 1511-1568) needs not be introduced to the Portuguese reader – he was one of the most prominent Renaissance physicians, well known throughout Europe. He practised in Portugal, Spain, Holland, Greece (then part of the Ottoman Empire) and the Ragusan Republic (Dubrovacka Republika), and was professor of anatomy at Ferrara university<sup>1</sup>. This year sees the 445<sup>th</sup> anniversary of the coming of Amatus Lusitanus to Dubrovnik (Ragusa), to which we would like to draw attention.

The free Ragusan Republic (which had been an independent town-state until 1808) had very detailed and well established hygienic and medical institutions from the Middle Ages on (e.g. the oldest quarantine). Some of its own renown physicians were active in other parts of Europe, and it is not surprising that on the other hand the Ragusan Republic was open to foreign physicians who performed not only practical, but also scientific work during their stay in Dubrovnik. They were mostly Italians but also physicians of other nationalities, such as Spaniards and Greeks, as well as quite a number of Jews who, persecuted for religious or political reasons in other countries, found refuge and work in Dubrovnik. Particularly famous foreign physicians of the 16<sup>th</sup> century were Donato de Mutiis performing his practice in Dubrovnik from 1526-1536, and Mariano Santo of Barletta, an appreciated surgeon well known for his invention of urinary calculus extraction method. Exceptionally prominent among them was Amatus Lusitanus. One of his principal books, a huge volume that won international acclaim and relates his experience, is called *Curationum medicinalium centuriae septem* with 700 case histories. The sixth of the *centuriae* contains descriptions of 100 cases he treated as the principal physician in Dubrovnik. It gives splendid insight into the contemporary medical and cultural situation of Dubrovnik, as well as information on Amatus' medical practice during the three years that he spent in Dubrovnik. He practised there with notable success from 1556 till 1558 when he had to leave, probably due to causing jealousy in his colleagues of local extraction (a case of "medicus medicum odit"). The most comprehensive work on Lusitanus in Dubrovnik was elaborated by the Croatian medical historian Lavoslav Glesinger<sup>1,2</sup>.

In his book which opens with "Amati introitus ad Curationes Ragusinas" Amatus describes cases he calls "curationes", each new case being a new entry. They contain a short description of the complaint, the name and age of the patient, a precise description of the disease and the curation, i.e. therapeutic procedure (with or without a more

elaborate explanation with quotations from medical authorities such as Hippocrates, Galen, and Avicenna). The greatest emphasis is given to therapeutic procedures and medications.

The diseases he describes include a variety of skin afflictions, dysentery, syphilis, heart problems, various fevers, bleedings, coughs and tuberculosis, etc. Sometimes only symptoms are given, not "proper" diagnoses in the modern sense. On this occasion we would like to point out only a few selected cases which in our opinion highlight Amatus' approaches to complaints/diseases and his therapeutic methods.

Curatio 87 describes how Amatus, acting as a court appointed expert witness, solved a case in which a young woman was accused and thrown into a jail for reason of causing deafness to a nobleman by using magic. However, Amatus' opinion was that the loss of hearing was caused by syphilis and he expressed the view that words cannot have a detrimental effect on health, thus showing a negative attitude toward superstition in medicine. Furthermore, the fact that this happened before the classic edition of Weyers' work against witch-hunts which appeared in 1563, augments his progressive declaration against witchcraft and superstition. Amatus moreover based his expertise on anatomical-physiological understanding of the interactive functioning of ear bones. His expertise clearly shows that he comprehended the functioning of ear bones perfectly well and importantly even four years (around 1557) before G. Fallopio's description was published in 1561<sup>3,4</sup>.

Amatus' work is important also for epidemiological information on our territory. He was the first for example to give us some data on podagra, gout (Curatio 41). He also noted how the prevalence of renal stones was high in Dubrovnik, pointing out that it is higher than in any other city he visited before. This fact he ascribed to drinking low-quality wine and he cured many patients. However he detailed only three cases he treated.

In his Curatio 59 Amatus prescribed to an 80-years old patient, who expelled an olive sized stone during micturition, *decoctum malvae cum gummi tragacanthae*, and told him to drink only water- diluted quality wine. It is evident that Amatus was drawing his knowledge from textbooks of Pliny and Dioscorides using habitually herbs, medicinal plants and techniques suggested there. For this patient thus he prescribed *Malva silvestris L.* commonly used in medicine for alleviation of irritation, for mucus softening and expelling. Also malva seeds were known as a potent aphrodisiac, and the leaves and flowers were used against ulcers, hemorrhoids, or against gastric and bladder inflammation. Tragacanth, commonly known as gum tragacanth,

is the dried, gummy exudate from *Astragalus gummifer* Labillardiere. The term is derived from the Greek *tragos* (goat) and *akantha* (horn) and probably refers to the curved shape of the drug; *astragalus* means milkbone and refers to the exuding and subsequent hardening of the drug; *gummifer* is from the Latin and means gum-bearing. Tragacanth was known to Theophrastus and Dioscorides and was used during the Middle Ages. It is employed pharmaceutically as a suspending agent for insoluble powders in mixtures as an emulsifying agent for oils and resins, and as an adhesive and is preferred for use in highly acidic conditions<sup>5</sup>. Wine proscribed also in this recipe is a common escort in various recipes against kidney stones.

In Curatio 91 to a ten years old patient whose micturition was interrupted by a stone, Lusitanus recommended local (sic!) application of asplenium and as he wrote, after an hour the stone came out. *Asplenium Ceterach L (Ceterach officinarum Willd)* grows on the walls and limestone of the Mediterranean. Even though its leaves were used not only against diarrhea, mucinous bronchitis but also cystitis, from today's point of view, it is hard to accept its local and external use, as well as its fast effect on a patient who suffered from urolithiasis. Nevertheless, learned physicians claimed to be able to prevent disorders by dietetics and drugs in Hippocratic style, and everybody (including monks and quacks) used local applications in their daily practice. The therapeutic armamentarium was divided not only in remedies to be used "on the skin" exclusively for skin diseases as one would expect, but also for ocular diseases and toothache, for wounds and for internal diseases (e.g. urolithiasis in this case).

In cases mentioned above Amatus recommended the use of healing plants for internal and external use. The following case of urolithiasis is described in Curatio 93. Remedies prescribed and recommended fulfill a four pages long list and are suggested for combination of both oral and local use. Among the 21 ingredients are: *coctum saxifragae*, fine ground eggshell, laurel berries, powder of a strangulated and incinerated rabbit, and white wine. Also, he suggested diet, belly smearing, enemas and hot baths. The family of *Saxifragaceae* is spread worldwide from cold through hot climates and it is used in vernacular medicine against bleeding. *Laurus nobilis* Amatus proscribed as diuretics and ground eggshell was probably functioning as pH changing of urine.

He also mentions powder of a burned glass, ashes of a burned scorpion and rabbit, sponge stone, goat's blood and several plants. To obtain all these components, a great effort should be made: the rabbit should be strangulated without losing a drop of its blood and then burned, a goat

should be slaughtered when the grapes are mature etc. Frequently the preparation of the healing drug was a mystified act, with elements of ritual and secrecy. The numbers used also have symbolic value - number 9 (it had a ritual and symbolic value from ancient times, both in the East and West; among other, it symbolises an entirety, the beginning and end, and redemption), while the number of 21 components with medical effect in Amatus' recipe may have had an other than empirical source: 21 was a special number since Babylonian times, and in Jewish tradition it can be linked with the 21 books of the Jewish Bible<sup>5</sup>.

Amatus describes in Curatio 25 how he was called on to try to cure the famous Croatian Renaissance poet Sabo Bobaljevic Glušac (*Glušac = deaf man*). Bobaljevic contracted syphilis in young adulthood and consequently lost his hearing. Some of his poetically best verses thematize his hearing impairment and other physical problems he suffered. Amatus writes that the cause of deafness in Bobaljevic was *morbis Gallicus* and that his patient, although only 34 years old, was *a ruin*. Apart from deafness, the poet suffered from violent headache (medicohistorical analyses have suggested that Bobaljevic suffered from *neuro-labyrinthis syphilitica*), which Amatus' remedies could only partially relieve. Medications he prescribed included *Lignum guajaci*, which had been used in the therapy of syphilis. This case is interesting because we have two written sources on the same disease/complaint – on the one hand, Amatus writes his comprehensive description of the patient's symptoms and the course of disease as a physician, with knowledge of medical science, and emotionally detached from the problem; on the other hand is the subjective self-reflection of the patient who writes in one of his poems: *I am like a tree-trunk in a mountain/and I might add dumb/because I cannot speak/for not hearing what is spoken*. The learned physician had soberly predicted that prescribed medications would not have great effect and the preparation of *Lignum guajaci* itself was difficult. The same was felt by the poet-patient, but expressed in vivid tones of bitter jokes and fading hope when he invented a cure for his illness: *both eyes of a flea/milk of a black hen/the sound of church bells/the gull of a snake*<sup>6</sup>. Particularly because it is physician-patient experience conveyed throughout four centuries, this case report presents a rarity both for its detailed description and for the documentation of the interrelation between a physician and a suffering patient.

These few lines commemorate the medical practice of Amatus Lusitanus-João Rodriguez in Dubrovnik, where he was held in high esteem not only by members of the government that employed him, but mostly by the many

patients he helped. These selected examples of Amatus' practice in Dubrovnik depict him clearly as a model physician of 16<sup>th</sup> century, with ample frame of classical knowledge but also determination to follow his own ratio and logic. Although some of his conclusions and therapeutic treatments may seem strange from today's point of view, we must not forget to interpret them in 16th century context when there was still a line existing between medicine and mysticism.

Direct links between Portugal and Croatia have not been numerous, or at least they are not well known and elaborately documented, particularly in the field of medicine. Therefore, the person of Amatus Lusitanus and his medical practice in the free Ragusan Republic (Dubrovačka republika) is a valuable proof of such existing links and also proof that both countries were connected, as was the whole Mediterranean cultural and civilizational sphere.

Amatus' work became a reference for all Croatian medical heritage researches.

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