

## Earliest Documents on Croatian Forensic Pathology

*Homo quantum scit – tantum potest.*

Dubrovnik has by far preceded many other medieval cities in the methodical preservation of its documents. The archive, as an “in continuo” of preserved documents from the end of the 16th century, is uncontested all over the world and the pride of Croatian literary heritage (1,2).

The oldest document from the field of forensic pathology in the Dubrovnik Historical Archives dates from 1312. It is a record of a court process, held on December 17, 1312, with Dr Mertača as a “sworn municipal court medical examiner” (3). The hearing was conducted to disclose the circumstances and establish the facts of the murder of Grgur de Cepre, a municipal guard. The incident happened when Grgur de Cepre “with two other guards... patrolled the City harbor”. They came upon “strangers arguing with some female... demanding of her to find them a girl for fun and pleasure”. The argument grew into a fight, during which Grgur was injured so severely that he died, whereby the court claimed it a homicide. Mertača, the Municipal surgeon, stated “... I do not know who murdered the man named Grgur, however, I clearly saw a wound to the left side of his chest, little above the nipple. Such a wound is fatal and was inflicted by a dagger or knife” (4).

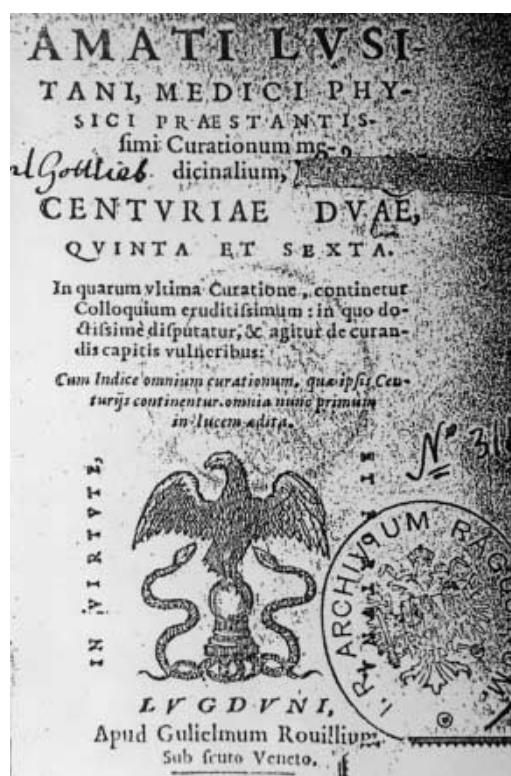
Mertača, “*medicus plagarum*” (as he was titled by the archivists), was also a court examiner in another case: “*Investigation of the wounding of Miho, son of Andrija de Visci, and Jakov, son of Radoslav de Matessa*”, which occurred on February 27, 1313. After taking an oath on the Bible, Mertača stated that “*lives of both wounded persons, Jakov and Miho, are not in danger and therefore, they can feel safe and should not fear for their lives*” (5).

Notarial records were the best-kept records in Dubrovnik Republic. Medieval *Contracts on Healing* were concluded in Notarial Offices and they reveal how medical practice was regulated in the Dalmatian and littoral Dubrovnik region of that time (6). The *Contracts on Healing* were fully binding legal documents concluded before witnesses between two interested parties: the patient, or his/her guardian, and the physician, the city doctor or surgeon. In most cases, the physician was a municipal official. His salary was paid from the municipal budget and he was bound by a contract to serve the city to the best of his abilities and knowledge. While in service, he enjoyed municipal free lodgings and additional privileges (7).

Why were then the *Contracts on Healing* signed between a physician and a patient when the physi-

cian was obliged anyway to *treat any municipal citizen free of charge* (7)? Mostly because diseases, which the physician was contractually obliged to cure, were usually serious, unpredictable, and incurable. By *Contracts* the physician protected himself from unpleasant situations that often developed in cases when treatment “took a turn for the worse”. Consequently, the patient was also protected by the *Contract* from any “predicaments” arising from the treatment (8).

From our point of view, these *contracts* provide a most comprehensive insight into all aspects of late medieval medical practice. They depict the level of physician’s knowledge of his patient’s illness. They also reveal the amount of medical knowledge of the time in general, the experience and practice of the mediaeval “*medicus*”, as well as his courage and self-confidence. In the *contracts*, there is a strong emphasis put on the award that the physician was to re-



**Figure 1.** *Curationum medicinalium*, a sixteenth century medical book written by Amatus Lusitanus, the most eminent physician in Ragusa at the time. It comprises 7 volumes, each containing 100 case files from Lusitanus' medical practice. (Photograph: courtesy of the Dubrovnik Historical Archives, 2001)

ceive once the case was solved, and less on the symptomatology and nature of illness.

The *Contracts on Healing* are sound, credible, and valuable historical documents for the better understanding of the late medieval medical practice (8,9). For example, from the *Contract on Healing* concluded on June 18, 1440, in a notarial office in Rijeka between the barber Pavao Vidotić and the patient Marin Krizman, we can tell indirectly what was the knowledge of pathology at the time, ie, how successful the barber expected himself to be in treating two wounds on the head of Marin Krizman. We learned that the "barber Vidotiæ obliges himself to fully heal the said wounds" for a sum of six gold coins (7). He was absolutely certain in the success of his treatment.

There is also an interesting *Contract on Healing* concluded on August 16, 1444. This contract was signed between the surgeon Tomo and Dominik Kerpunić, who was a guardian of Petar Šipac from Krk Island, and it stated that "surgeon Tomo shall heal Petar successfully, for 15 gold coins" (7). Archive commentaries indicate that the treatment was unsuccessful and that several months after the contract had become valid Petar uttered his last breath. In October 1445, at the court of Rijeka city, surgeon Tomo submitted details on the cause of death of Petar Šipac. The surgeon declared that Šipac did not die from the head wound inflicted by a rock, but from the head wound inflicted by a sabre. That wound was quite deep, the "blood in the deeper parts of the wound became spoiled" and circulated to other parts of the body. Hence the large pustules on Šipac's left arm and leg, which brought about the death of Petar (7).

Ten years earlier, in 1435, *Friederick of Nürnberg* was accused in Zagreb of an "unsuccessful operation performed on a boy named Ivan". While attempting to remove a bladder stone, the physician severed the urethra and the boy died three days after the intervention. According to the case file, we can conclude that the death was possibly caused by urosepsis because "pus and foul smelling urine were leaking out of the incision". We also know that the incision was made in the perineum, because that was the only kind of operative approach performed up to the beginning of the 20th century (10). Physicians were apprehensive about causing the injury of perineum intraoperatively, because they knew that it could be deadly. Therefore, they usually tried to avoid such an operation. Today, the lower medial laparotomy is referred to as the *sectio alta*, because, compared to the transperineal approach, the incision is made "higher" than in the medieval times (11).

Not only was the surgeon Friedrich obliged to return the sum of money to the boy's mother for the operation, but was also convicted "as the surgeon who brought about the boy's demise, which would forever be a burden to his conscience" (6).

This document describes the development of a disease that ended with the death of a child not so much because of the inexperience of the "traveling sur-

geon", but because of the usually high death rate in such and similar operations in the late medieval period.

Let us return to the Dubrovnik Historical Archives and refer to the one of the many valuable books: *Curatium medicinalium* (12), written by Amatus Lusitanus, probably the most eminent figure practicing medicine in Ragusa. From the seven books, each comprising 100 case files from Amatus Lusitanus' medical practice, a case depicts the pathology-forensic knowledge of the 16th century. In the sixth book, under No. 62, there is a description of and conclusion about the death as well as a *certificate of death* of an abbot from the Lokrum island. The physician, Amatus Lusitanus, arrived too late: "as soon as he was transferred to the Lokrum Abbey, he could only establish the demise of the abbot". He established the death by the following findings: (a) no wrist or temple pulse, (b) no movement or flexion of the heart, (c) candle flame stillness in vicinity of the nostrils, and (d) mirror surface was clear. The final confirmation was when a "bowl filled with water on his chest remained unperturbed". However, as the abbot died quite suddenly, he requested that the burial be postponed for at least one to two days (12).

These examples vividly illustrate how the forensic aspect of medicine was regulated in medieval age and might serve as an invitation to all curious investigators to visit the Dubrovnik Historical Archives and discover other secrets they keep about medieval physicians in Dubrovnik.

Jurica Bačić

- 1 Šundrica Z. The founding and preservation of the Dubrovnik Historical Archive heritage. Dubrovnik: Dubrovnik Historical Archives Anthology; 1978;I:23-35.
- 2 Lučić J. Dubrovnik Historical Archives as a source of Croatian history. Dubrovnik: Dubrovnik Historical Archives Anthology; 1978;I:57-76.
- 3 Bačić J. Medieval Dubrovnik physicians (XIV and XV century). Zagreb: Medicinska naklada; 1997.
- 4 Lamenta politica, I. fol 23. Dubrovnik Historical Archives.
- 5 Lamenta politica, I. fol 37. Dubrovnik Historical Archives.
- 6 Grmek MD. Medieval medical contracts from Croatian area. From Croatian medical past. Zagreb: Association of Croatian Physicians; 1954. p. 154-5.
- 7 Gigante S. Libri del cancelliere, vol. I. Rijeka (Fiume): Cancelliere Antonio de Francesco de Reno; 1912. p. 173,188-9,390,399-400.
- 8 Bačić J. The development of medicine in ancient Dubrovnik. Rijeka: Izdavački centar Rijeka; 1988.
- 9 Čremošnik G. Several Dubrovnik medical contracts. Dubrovnik: Rešetar Anthology; 1931;I:43-5.
- 10 Castiglioni A. Storia della medicina. Milan: Biblioteca statale; 1927. p. 226-34.
- 11 Bačić J. Urology in Dubrovnik (1555-58). World Journal of Urology 2000;18:376-80.
- 12 Amati Lusitani, medici physici praestantissimi. Curatium medicinalium, Centuriae Duae, Quinta et Sextae. Venezia 1564. Dubrovnik: Bibliotheca Ragusina 33, Rešetar M. (Sign I.,1), 444-6.