Cesare Magati. Spanning over centuries

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Abstract. When talking about the History of Medicine we refer to various considerations about the ways in which body, health and disease are built, experienced and even negotiated. The primary literature texts investigated in this article are *De rara medicatione vulnerum* written by Cesare Magati, published in 1616, and the two articles written by Professor Egisto Magni published in the «Bullettino delle Scienze Mediche» in 1917 and 1919, the former on the rare dressing of Magati and the latter on the reform of the Magati surgery. The medicine of Magati saw the body through the discrepancy of humors, and his scientific point of view started from the statement that the distinction between doctor-surgeon and doctor-physician was «one of medicine's misfortunes, something without reason, without authority and a damage to the patient».

Key words: Cesare Magati, Egisto Magni, wounds

Introduction

Documentation of the life and work of Cesare Magati (1-3) is not exactly plentiful yet unexpected and valuable (4). It comes to us thanks to the conservation activity carried out at the time by the Capuchin friars: the Order not only pointed out the spiritual and religious quality of fra' Liberato da Scandiano, the name used by Magati after his entry into religious Capuchin life, but it also conserved his precious medical equipments. Born on July 14th, 1577 (5) in Scandiano from a family of landowners, in 1597 Magati obtained a degree in Medicine and Philosophy at the University of Bologna, where he attended the courses of Giulio Cesare Claudini, Flaminio Rota and Giovanni Battista Cortesi. Before turning to practice he deemed it useful to spend some time in Rome at the Hospital of S. Maria della Consolazione. Though being a follower of the galenic *ipse dixit* which was still taught in Universities, he began to consider a new way to see and interpret things. After this rich experience in Rome, Magati returned to Scandiano then moved to Ferrara. He passed a practical exam in front of the College of Physicians and began to work as a surgeon in the Hospital of S. Anna. In Academic Year 1612-13 he also obtained the Chair in Surgery at the University of the same city, which he held until 1618 when he decided to "give a kick to the world" entering the Order of the Capuchins. At about 41 years of age, when he had reached a respectable position as a surgeon and professor, he became a monk. This radical lifestyle choice did not imply the abandonment of the profession: in fact, he put his medical and surgical skills not only to the service of the brethren, but with the permission of his superiors he regularly visited the bedside of many famous people (6) who trusted him to heal their illnesses. Unfortunately, his bladder stones afflicted him often so he decided to undergo surgery by an experienced surgeon who removed three big stones. But, as reported by his first biographer padre Francesco Vecchi da Modena (1621-1693), surgery had complications (7) and three days later, on September 9th, 1647, he died in Bologna in Convento di Monte Calvario.

Primum non nocere

The background from the mid-sixteenth to the mid-seventeenth century was permeated by a progres-

sive and intense conflict of trends especially in science and in religion. During this period, a revolution began and led to a new scientific renewal.

Despite the fact that the engine of the century was the principle of authority, for more and more scholars the scientific dogma was not enough: they wanted to prove to themselves if received teachings were accurate, and if they had found that the Masters were wrong, they would have corrected them (8).

Not with standing the danger of moving away from the path traced by traditional medicine (9), Magati was a reformer, and he could take the road of free observation, experiment and reasoning with unexpected results.

We remember Cesare Magati as the author of De rara medicatione vulnerum which is a printed work that, besides dealing with an innovative and alternative method compared to the one of the Hippocratic-Galen derivation commonly in use in his days, also emphasizes the healing power of nature. Extremely noteworthy, but probably due to the fact that he was a doctor before becoming a monk, was his disregard of the concept rooted in Judeo-Christian religion where man must act as a sovereign and master of nature, according to the precept of the Bible «Be fruitful and multiply, and fill the earth; and have dominion over the fishes of the sea, the birds of the air and over every living thing that moves upon the earth» (Genesis 1, 28). And here Magati was very far from the aspiration to control and change Nature.

Salvatore De Renzi described him like «a bold reformer» (10), but Magati was also fundamentally convinced of the validity of the Galenic system (11), so his way to be different was intelligently gradual (12) and he always tried to support any thesis with extensive citation of some passage from works of Hippocrates and Galen. However he clearly and repeatedly showed his being curious and open to new "evidences": on one hand he explained the disease by "standard procedures", but on the other hand he legitimated the subjectivity of the patient.

Alternative method of wound care, showed more delicacy and resulted in less protracted efforts over the time, and it deeply influenced the development of the concept of pain, especially avoidable pain.

We know that medicine is not only statistical evidence but is also made up of stories. A single case can go beyond the average and can provide us with vital information. His meeting with the "case" was with a young girl in a Roman hospital who had a wound he needed to heal. We well know that those were rather turbulent times and that swords and daggers were used with too much confidence. The direct consequence was that hospitals were collecting a large number of wounded patients, and the surgeons did not always have the time to treat them in the proper way.

De rara medicatione vulnerum (13), written in Latin, is the result of Magati's reflections in the period between his stay in Rome and Scandiano, and we can definitely consider it as the first manifestation of Italian surgery about wound treatment. The treatment method was further (14) elaborated in Ferrara, where he had the Chair in Surgery from the Academic Year 1612-13 to the Academic Year 1617-18.

Although the system he proposed had distinguished and strong supporters, including the famous Lodovico Settala (1552-1633) (15), the ordinary lecturer in Milan and chief physician of the Duke of Milan, it was widely opposed. As it often takes place to all who shine, and inevitably cast a shadow around, Magati was the target of the envy of his surgeon colleagues since when he taught in Ferrara. Many doctors were very inclined to get into scientific-literary struggles, and the formation of scientific factions was a natural result. New ideas usually instill doubt that the "new" does not really have a "good" content.

The History of Medicine is full of polemical writings involving men of letters and of the medical-scientific world: it was common in the seventeenth century as well as in more recent times. Some of these writings, but not all, have the merit of showing medical problems of great importance. Many experts of the History of Medicine rightly think that it would be possible to reconstruct an "alternative" history of medical thought by the struggles that physicians have expressed over the centuries, of course making distinction between those which were animated only by strong passions but with ephemeral content, and real disputes showing great and lasting value.

The polemical struggle between German physician and naturalist Daniel Sennert (1572-1637) (16) and Magati and Settala was one such dispute: it was a violent attack, although always somehow mitigated by pompous Baroque statements. Sennert strongly defended the medical tradition that originated from Galen, although he could not support his ideas by his own case histories since he was not a practising surgeon; he tried to prove very punctiliously that the methods adopted by the doctor coming from Scandiano retarded or even prevented wound healing. When the work of Sennert was published, Magati had already retired in the Convent of the Capuchins in Bologna and considered it inappropriate to enter directly into polemics with his German colleague, but there was a firm answer all the same: *De rara medicatione vulnerum* was reprinted with an addition at the end of a *Tractatus*, *quo rara vulnerum curatio defenditur contra Sennertum*, written (17) by his brother Giovanni Battista.

The controversies around his work arose from his considerable innovations in the treatment of wounds. The usual practice held that wounds should be medicated several times a day, and it was widely believed that the deeper ones would have been more easily healed by keeping them open for a long period of time. On the basis of the many positive results, Magati proved that less frequent (18) and gentle (19) dressing was much more effective. One such "case" was when he had to treat a girl who had a thigh wound. Although he treated it twice a day, for about six months, it did not get better. Magati began to dress it more seldom and things went better and better so that after treating it every four days the wound healed. He was very puzzled because the usual practice required the medication "several times" a day.

From a pure practical point of view, the experimented method which Magati introduced simply consisted in a delicate and not too recurring dressing, trying to cause the least possible pain; he was also against the application of «taste» (20) and the use of stylets. He tried to avoid the use of any irritant substance and especially he did not leave the wound exposed to the air, covering it as quickly as possible with clean and light diapers to keep the heat. It is also worth remembering that he treated the wounds with medicines (usually wine or spirits), but he used them rarely. The conclusion he reached was that it is the force of nature that heals wounds and the doctor must only let nature to do its work because often, especially in tough subjects, it succeeds in obtaining healing even when the wrong method of the doctor endangers the patient's life.

Despite being a graduate and so medicus physicus, Magati was careful not to ignore the direct intervention on the body and he always had a preference for surgery, even though it was considered inferior to medicine. In his treatise he affirmed that it made no sense to separate the surgeon and the doctor. He believed that the chances of recovery would have been much higher if a single professional figure who had the knowledge of both the doctor and the surgeon was at the bedside of a patient. Such opinions called into question long accepted and established professional as well as social distinctions. His stubbornness in applying a new method of treatment of wounds in the hospital of S. Anna provoked the hostility of many colleagues, and Magati replied by pointing out that their attitude was dictated by personal interests.

According to the paper documents known today, we can say that while in the surgical treatment of wounds he was an innovator, the medical therapy he recommended both in the surgical treatise and in medical consultations, did not differ from that of his time: all his *recipe* were taken from herbal medicine. The only exceptions to the rule were the prescription of a little bit of triaca, a little bit of mitridato, a little bit of hyacinth powder, pearl and horn. But it is clear: the rejection of these rare and expensive drugs would have discredited him in the eyes of patients, like a doctor who nowadays does not prescribe antibiotics.

He started from his practical results obtained in Rome, and he showed also another fact regarding wound healing. When Magati graduated in 1597 in Bologna, the work (21) of Girolamo Fracastoro (1478-1553) was well known; he realized by observation and reasoning that infection was transmitted by *seminaria contagionis*. Magati had no doubt that the air is pernicious for all wounds, and in fact in his treatise, as mentioned before, he said that people should avoid air influence, expecially bad air (22), on the wounds.

It is also worth briefly recalling that the problem of wound care was already debated by Teofrasto von Hohenheim, also known as Paracelsus (1493-1541), and by Ambroise Paré (1510-1590). Paracelsus wrote about the successful wound treatment, and he wrote that a single medication could heal a simple wound; that's to say it could have long lasting effectiveness. As to Paré we can remember that thanks to the lack of boiling oil, he could perform an experiment in the field hospital: he had the idea to prepare a lotion with yolk, attar of roses and turpentine that led to the healing and curing of pain in battle wounds (23).

With these assumptions, it is clear that this doctor-monk was entering a particularly treacherous field, touching the prestige of some "luminaries": the wounds treated with his method, as innovative as respectful of the forces of nature, healed too fast. The long protracted treatment with visible great effort lost importance and consequently brought less money to the doctors still pursuing traditional methods.

In his treatise Magati reported cases he actually experienced investigating various aspects present in the patients. So he described carefully every phenomenon from symptoms to prognosis and treatment. Magati did his research with determination and courage. What is more interesting is to ask why. It is easy to imagine how tough his life was, especially in Ferrara (24). It was said that it was no good for a Capuchin to embark on a self-defense controversy, but Liberato had to defend not only his person, not only his fame: he had to defend a method that was not his.

The other debate I'd like to present regards Benedetto Schiassi (1869-1954) (25), Professor of Clinical Surgery at the Royal University of Bologna and ordinary member of the Medical and Surgical Society. He wrote an article reporting that in 1907- 08 the Bolognese community, and not just the medical one, made several comments on the conduct of Dr. Egisto Magni, who did not change the dressings unless they were soaked from several days of exudates, so he deemed to apply the ideas of Cesare Magati. Schiassi was firmly convinced that Magni had not completely understood the thought of Magati and asserted that unless wadding was changed, these engorged by exudate would have produced an occlusive effect. That would have been the opposite of what was desired by Magati. In his opinion he did not apply the "rare" medication, but the "closed" medication exposing the patient to very serious consequences. The controversy had started since 1917 and it repeated the same call and response pattern. In the «Bullettino delle Scienze Mediche» of 1917, we find on page 11 an article written by Professor Egisto Magni entitled «La medicatura rara del Magati e la medicatura unica nella cura dei processi infiammatori acuti localizzati». Moreover, in the «Bullettino delle Scienze Mediche» of 1919, on page 17 we find another article written by Professor Magni entitled «Cesare Magati e la sua riforma nella chirurgia».

In this case, as in that between Magati and Sennert, we are not dealing with the purely academic taste of the elegant and abstract questio, but with a professional war that has no pauses for reflection: Magni meticulously reports - with polemical tracts - the statistics about his dressings and the results published by the Ospedale Maggiore covering the years 1904-1909. He emphasized the fact that these statistics had never been required before. In the late nineteenth-century the objectivity of data provided the ideological basis of the new social order, and faith in the unlimited power of medicine was wrapped up in the myth of progress and development. The method of this medicine was still part of the critical discussion, according to the method of conjectures and refutations; so the establishment of this medicine is democratic, and among doctors everybody has the opportunity to exercise critical thought without restriction. Doctors played a special role in guiding the public regarding progress in sanitation, disease management, and health. As the relationship between humans and nature came to be understood as hostile in the sense that disease came from natural rather than divine causes, doctors were essential in helping people to understand how the new interventions could improve health and wellness.

In the medical world the still open wound between "old medicine" and "new medicine" is hard to heal, and its reform is achieved primarily as a review of operational criteria. It is important to remember that in the first half of the twentieth century, in the field of infectious diseases for example, the importance of the constitutional factors with the concept of "organic predisposition" / "immune reaction" began to spread. However, in Italy we refer to the twentieth century as the "golden age of surgery" and anesthesia is also starring as co-responsible for this progress. Able to prevent agony to the surgical patient, it was already known in the sixteenth century (26) but was applied so late because the time was not right: it took until Enlightenment ideas for a new vision of man that could erase the value of moral heroism in suffering (27). In those days Magni felt the need to write two articles on the rare dressing method

of Magati and its importance in surgery. He published them on the «Bullettino delle Scienze Mediche» where they would be clearly visible to the academic audience. In the «Bullettino delle Scienze Mediche» in 1917 Professor Magni declared immediately that he used still and with success the Magati method and also declared that the purpose of his article was «to show how sometimes the indication to dress infrequent can, in many cases of a localized acute inflammatory process, result in healing after having only used a single dressing. Thus was born what I call the "unique dressing", which I have performed in many cases since 1910 with truly marvelous results». Magni promoted a rational empiricism, and the statistics on the improvement of the patients he reported showed how much the infrequent dressing was beneficial for them. As mentioned above, this resulted from the idea that disease as a state was different from the health not for quality, but for level, and so measurable.

The hospital in the early twentieth century showed the birth of social medicine. Through the articles of Magni we can see that the cost and benefit problems intwine with the relationship between those who managed the hospital and those who had benefits from such an apparatus. From one side the relationship between the hospital and the emerging health care industry is clearly visible, from the other the doctor-patient relationship is ex novo redesigned. While the doctor is getting closer to the physiopathological world of the patient thanks to the technological apparatus that is now available, this same technological apparatus separates the anthropological world of the patient from the doctor. The age of physical contact between doctor and patient is dead, and the medical-technological one is beginning. In the early twentieth century the passwords in medicine were "science and humanity", and the wake of medical achievements which increasingly celebrated science and technology. Doctors like Magni whose professional identity had been shaped by very precise values stood out. He did not hesitate to also propose the article entitled «Cesare Magati e la sua riforma della chirurgia» and published it in the «Bullettino delle Scienze Mediche» in 1919 where he told the life of Magati.

Magni was very aware of his being a doctor, and he firmly asserted that thanks to clinical signs it was not true that a doctor could not know the status of a wound without discovering it.

Conclusion

At the end of this whole discussion, it is clear that the History of Medicine and of its doctors, is the struggle of man against death, against disease, against suffering; and it is the history of Magati, of Sennert, of Magni and of Schiassi. I wish to conclude my writing with a passage directly taken from the article written by Magni in 1919 and that should give us food for thought: "Scientific observations of sublime surgeons have often led to belief in a new discovery; so rare dressing of Magati was affirmed by some as a surgical innovation. Here are the disputes to the leadership of the advantageous method. Nothing of this would happen if doctors had a little more historical culture of their specialties."

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- 8. The Masters were Hippocrates, Galen, Avicenna, Aristotele.
- 9. As Professor of the University, Magati followed the traditional approach in teaching programme but, at the same time, he taught the students his new wound care method. So he was rebuked for excessive freedom of thought and medical action over and over again, and he was asked peremptorily to follow the teaching of the old Masters.
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- 12. In addition to the several mentions of Galen, Aristotele and Hippocrates, in his medical and surgical writings we can

find also Ugo e Teodorico da Lucca, Enrico di Mondeville, Guy de Chauliac.

- 13. The first book deals with the treatment of wounds in a generic way and it is dedicated to illustrate the new method of treatment, while the second is formed by a collection of cases aiming to validate this practice.
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- 26. The discovery of ether is due to Paracelsus (1493-1541).
- 27. I am referring to the thought of Giacomo Tommasini (1768-1846).

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