

Some observations on the signs of certain death in the 18th century

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Summary. In 1783, the work of Ferdinand de la Boissiere, *Letters above the certainty of death signs with various observations and experiences over the drowned*, was published in Rome. Manuscript is a translation of the French work of Antoine Louis, *Lettres sur la certitude des signes de la mort*, printed in France in 1752 and in which the surgeon discussed on the certain diagnosis of death. The Louis's work represented an important contribute of medicine especially because in the 18th century only the appearance of the first putrefactive processes was recognized as the indisputable sign of death. In the debate of the time, the treaty of Antoine Louis (1723-1792) overtaken the believed that the only indisputable sign of death was the appearance the first putrefaction processes. Our paper is limit to offering some author's account around the characteristic signs of death, which dispense from putrefaction of the bodies or the rigidity of the limbs and the collapse and softness of the eye. The book boasted a great meaning in the medical association of the time, especially because it discussed with contemporary criteria the signs of certain death. (www.actabiomedica.it)

Key words: Ferdinand de la Boissiere, Antoine Louis, signs of certain death

Lettera sopra la certezza de' segni della morte con varie osservazioni ed esperienze sopra gli annegati. Versione francese. Letters above the certainty of death signs with various observations and experiences over the drowned. French version. Ferdinand de la Boissiere published the book in Rome in 1783 (1). It is a very interesting work of 250 pages, composed by "six letters", "a memory", "a notice", "a reasoned examination", and "a conclusion". Three small chapters of surgical observations of the author (*On the way to bring together the lip Leptorrhino, above cancerous tumours. On the usefulness of Forceps it difficult parts*) followed the translated book. Even if the translator never revealed the author's name, it was not difficult for us to discover the paternity of the original work. It was the translation of the manuscript of Antoine Louis "*Lettres sur la certitude des signes de la mort*", published in France in 1752. The book boasted a great meaning in the medical literature of the time, especially because it discussed with modern criteria the

signs of certain death. The immobility, the absence of respiration and the cardiac arrest were considered the major indicators to ascertain death. Our historiography between the 18th and the 19th century boasts several titles on the subject of the signs of certain death. A good review of the relative bibliography appeared few years ago in interesting essay of Claudio Milanesi (2).

However, no certainty of guidance had been outlined yet during the 18th century the medicine discussed with updated criteria around the concept of apparent death. Physicians of the past often discussed on the certain signs of death, distinguishing those "spontaneous" with several observations. The most important were: the pulse, the absent of respiration, the *facies ippocratica*, the *rigor mortis* and the eyes flaccidity. They recorded among the "traditional evidences": sternaltatori, herbs stinging, the glass of water placed on the sternum, while among the "surgical evidences" they listed: the scarification, the needles introduced under

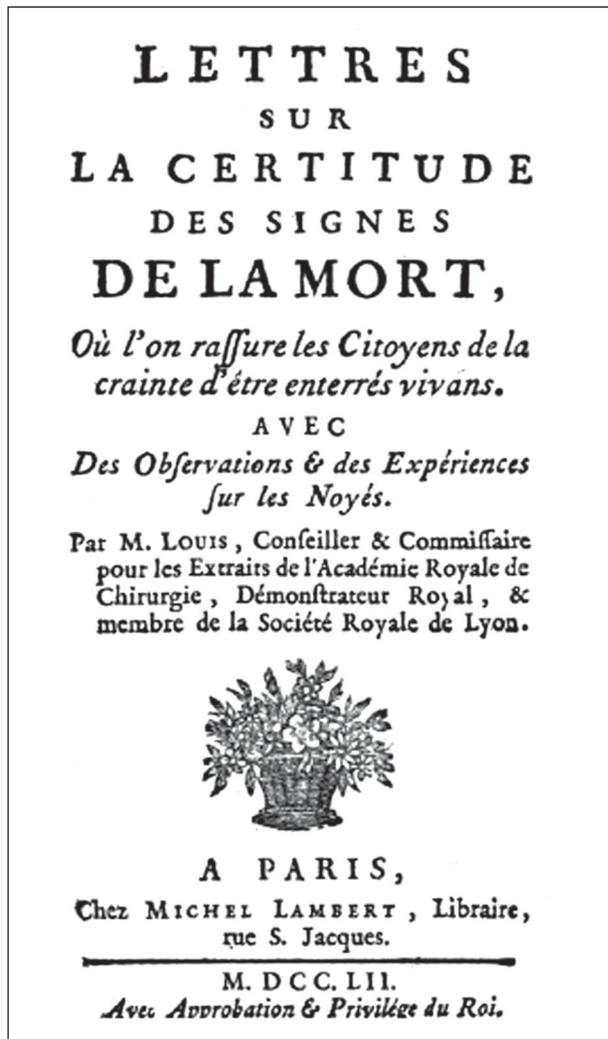


Figure 1.

the nails, the etching of the foot sole. In the past, it was very high the risk of making incorrect diagnosis of death, especially because some signs were confused with the symptomatology of some diseases. The scientific community generally described that the insensibility and the manifestation of death appearances occurred especially in cases of suffocation, apoplexy, fainting hysterical, of frostbite by lightning. These arguments were reported also in some medical texts of several specialties and in some philosophical treatises. In this regard, the Benigne Winslow's work, published in 1740, *An mortis incertae signa minus incerta a Chirurgicis, quam ab aliis experimentis?*, was indubitably among the important treatises of the time. The thesis,

presented by Leandre Peaget in the Medical Faculty of Paris, discussed on the problematic related the uncertain surgical evidences that traditional were used to diagnose death. The thesis work was translated and expanded by Jean Jacques Bruhier (1658-1756). The author showed the statistics of incidents of the time, trying to testify the frequent risk of being buried alive when the burial occurred before that the signs putrefaction appeared (3). It was also necessary to rely on certain aspects of anatomical research that in those years instructed the preservation of corpses (4).

Winslow's thesis and Bruhier's dissertation highlighted several stories and legends about the uncertain diagnosis of death, which undoubtedly contributed to spread the loss of credibility of the medical science. In the debate of the time, the treaty, in the form of letters, of Antoine Louis (1723-1792) raised the controversy on the believed that the only indisputable sign of death was the appearance the first putrefaction processes (4). The author in the fourth letter claimed the ability to identify the certain symptoms to reach an indubitable diagnose of death reporting in broad examination. It is evident that Louis sought to counteract the distrust of medicine that, despite being included in the domain of experimental sciences, included several doubts, controversial from different points of view and often opposed to each other. The ideas of the French surgeon were disclosed in the Italian scientific literary circles thanks to the translation of Ferdinand de La Boissiere, as mentioned above. The Italian edition, dedicated to Monsignor Rommualdo Braschi Onesti, the nephew of Pope Pius VI, was enriched with the addition of other surgical observations of the translator. Here we don't tell about the each letter of the work but we limit to offering some author's account around the characteristic signs of death, which dispense from putrefaction of the bodies or the rigidity of the limbs and the collapse and softness of the eye. For example, the author talk about the inflexibility of the joints, which could depend from the convulsive syncope of the body and that it could be confuse with a death status. The author also described the difference between the cadaveric rigidity and a transient muscular restriction. In the second case, the degree of flexibility of the affected muscles and their antagonists is different. In addition to this, the alteration of the ocular bulb was a decisive sign to

refute any doubt in a diagnosis of death. It is undeniable that the spreading fear of premature burial, spread by the Bruhier and Winslow thesis, was excessive in relation to the effective danger. Moreover, the dogmatism that animated the minds of their opponents, despite the irrational spread of such a fear, could hinder the progress of scientific research. The ideas presented in Louis's work and the translated work did not obtain the comfort of being accepted, even if throughout the 19th century Legal Medicine continued to affirm that the only sure sign of death was the beginning of the putrefactive phenomena (5). We find significant traces of scientific interest in these themes also in the medical teaching of the University of Pavia, when in 1825, the student Marcoantonio Germani, discussed his degree thesis with the professor of legal medicine Camillo Platner, dealing the theme of the signs of death (6). Pavese's academic reality, where J.P Frank's great medical teaching was still dominant, was one of the most favorable environments to examine these issues. Indeed, in his dissertation, the student did not forget to talk about the establishment of the mortuary chambers that Frank's dictates had recently imposed, in response to the requests for prolonging the time of exposition of the corpse. Moreover, Germani discussed the legislative arguments, referring to the most significant features of the decree, which regulated the burial of the corpse and which required to doctors the *sacred duty to visit the dead and to write the death certificate to avoid the danger of burying a person asphyxiated* [...]. Echoes of these discussions were also present in the second half of the 19th century (8, 9) To conclude, Ferdinando de la Boissiere did not make any personal contribution to the medical diagnosis of a certain death. The authentic fruit of his thoughts are just the definitive pages of the work in which he expressed himself with the skills of the surgeon of the time.

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Received: 14 September 2017

Accepted: 28 September 2017

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