
History of Forensic Medicine – the Third Part

The Development and History of Forensic Medical Science in Middle Europe

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The history of Forensic Medicine as a branch of General Medicine, if traced back, started slowly and inconspicuously. The first historically verified forensic postmortem was performed in Bologna in 1302 and has been previously mentioned many times. A man named Azzolino, who had a lot of enemies, died shortly after he had enjoyed a meal with his guests still around him. Within a couple of hours following his death, Azzolino's whole corpse had turned black. The anatomist Bartolomeo da Varignana was ordered by a State magistrate to establish the cause of death in this suspected case of poisoning. Such situations however, were utterly exceptional.

The Criminal Code of Bamberg, issued in the German town in 1507, can be taken as a foreshadowing of future systemic and specialized duties of a forensic doctor, because such a person was ordered to write an expert's account for perusal by the Criminal Court.

The Roman-German Emperor Charles V (1500–1558) issued his "*Constitutio Criminalis Carolina*" in 1532. Among other important rules, it also stated that the expert - medical doctor had to be heard and examined during trials dealing with death caused by other persons. The Caroline Codex remained in force until 1871, when a German Reich Criminal Codex replaced it.

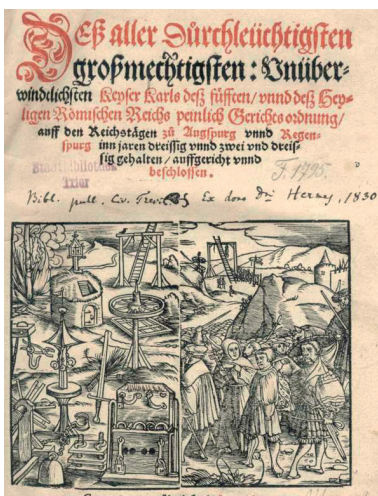
In 1602, a Sicilian doctor, Fortunatus Fidelis, issued "*De relationibus medicorum*" in Padua. It was reprinted and reissued many times in subsequent centuries. Nevertheless, it was the surgeons, at least at the very beginning of forensic medicine, who practiced it while trying to solve criminalistic problems and helping in Law Court trials, using their knowledge of medicine. Fidelis, just like his contemporaneous colleague Battista Condrochi from Bologna, appealed to the authorities, asking them to reserve forensic medicine to the academics, because he felt they more knowledgeable. As a result, he also revealed professional errors of surgeons and he divulged them in his voluminous

and systematic works. His wish was to regulate surgeons' activities through a more scientific approach in medicine, knowing too well how a lack of knowledge on their part exposed the patients to a great peril.

Paolo Zacchias published his "*Questiones medico-legales*" in 1621; the first volume of which dealt with forensic medicine. The work discerns this branch of medicine from Roman and Church Law aspects. Because of his work, Zacchias is rightly seen as the founder of forensic medicine. Among his many discussions he said, for example, that to live in separation from a TB-ill wife was the right of her husband.

John Graunt (1620–1674), the owner of a small shop in London, started to keep statistics on causes of death and in 1661 he submitted his results to the Royal Society. In the following year he published a study called "*Natural and Political Observations upon Bills of Mortality*". His work and results are very important from a general statistics viewpoint, but forensic doctors have to admire his categorisation of causes of death, such as illness, fatal accidents and involuntary death.

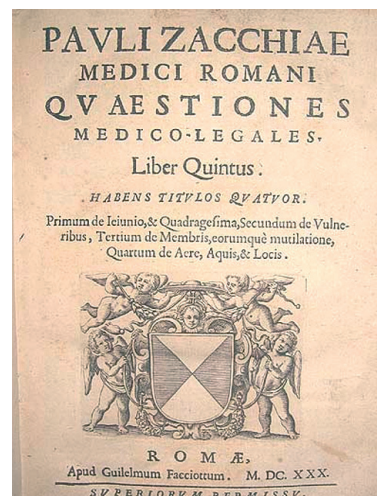
In the 1670s, Karoly Rayger published several of his articles on verification of clinical diagnoses by post mortems in "*Miscellanea*", issued by the Academia Leopoldina. Albeit these works were connected with both the Pathological Anatomy and Forensic Medicine, his disputation, proposing "*lung float test*" belongs more to the latter. As a matter of fact, this proof of test was firstly performed in 1681. The lungs of a newborn which inhales air, float on water, whilst the lungs of a newborn who does not breathe after delivery, are heavier and hence sink in water. On October 16th 1681 neighbours found the corpse of a newborn child buried in the backyard of the Voigt family. The only possible mother of the child was 15 year old Anna Voigt. She denied murdering her baby, claiming the infant was stillborn. The Caroline Codex requested an expert physician to



Constitutio criminalis Karolina
<http://www.landeshauptarchiv.de/ausstellung/unrechtungrecht/>



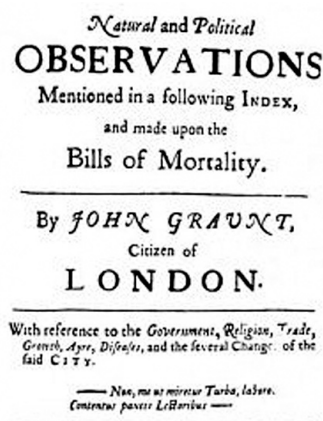
Paolo Zacchias
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Questiones medico-legales
<http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3758303224>



John Graunt
<http://www.ork.ac.uk/depts/maths/histstat/people/graunt.gif>



Natural and Political Observation
<http://www.larrakis.es/~mcj/historias/graunt2.jpg>



Joseph Berndt
 Schott Heinz: Kronika Mediciny.
 (Der Chronik der Medizin, Dortmund 1993).



Johanes Franciscis Löw von Erlsfeld
 Schott Heinz: Kronika Mediciny.
 Fortuna print, Praha 1994
 (Der Chronik der Medizin, Dortmund 1993).



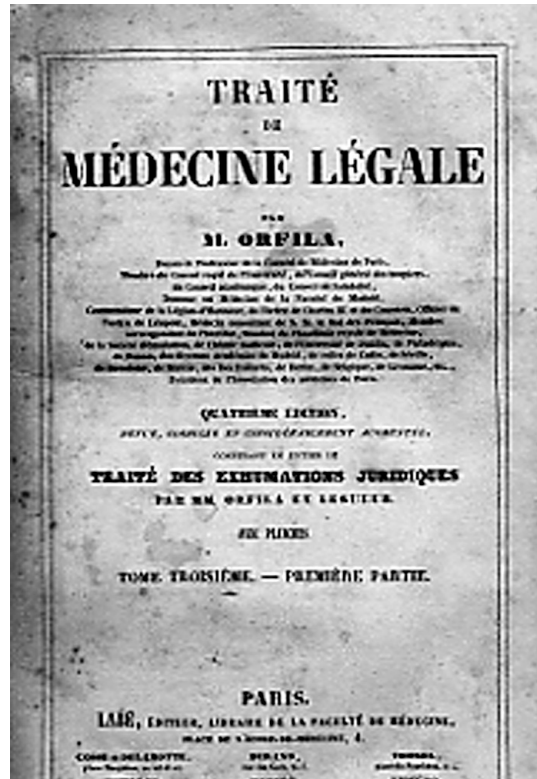
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Josef Reinsberg
<http://forum.cuni.cz/IFORUM-1714.html>



Mateo Jose Bonaventura Orfila
<http://www.shpusa.com/books/orfila.html>



Leçons de médecine légale
<http://www.ssmc.asso.fr/ssmc/images/orfila.jpg>



J. L. Casper
 Schott Heinz: Kronika Mediciny.
 Fortuna print, Praha 1994
 (Der Chronik der Medizin, Dortmund 1993).



Eduard von Hofmann
 Schott Heinz: Kronika Mediciny.
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be involved in such a case. Municipal physician of Zeitz (Sachsen-Anhalt, Germany), Johannes Schreyer, was asked to investigate the corpse. Schreyer performed the lung float test with a negative result. He had confirmed Anna Voigt's innocence by a test in use even nowadays.

Johanes Franciscus Löw von Erlsfeld born in Plana near Marienbad (now Mariánské Lázně in Czech Republic), was one of the first academics who dedicated his systematic interest to the problematics of forensic science. He obtained his Medicine (1672) and Philosophy degrees in Prague but continued his Law studies in Rome and also graduated there. Later on in his life, he was nominated as a Professor of Charles-Ferdinand University, Medical Faculty in Prague and elected nine times as Dean of the Faculty and four times as Chancellor of the University. He was also a principal member of the panel of experts, who deliberated on the relics of St. Johannes Nepomucensis in 1715 before his canonization. For Forensic Medicine history, his "*Theatrum medico-iuridicum*" is of utmost importance as this was the first publication of its kind originating in Middle Europe. It was published in Nürnberg shortly after Dr. Löw's demise in 1725 and contained contemporary religious ideas, superstitions and beliefs in visions and miracles, which the author tried to define and explain. But criminal problems were also dealt with, namely psychotic disorders, deliberate poisonings, simulation of diseases and, in the closing chapters, the ethics and medical doctors' responsibility for their errors and possibilities of starting criminal proceedings against them. Dr. Löw is buried in Prague, in St. Maria Victorious Church in Malá Strana.

Lectures on Sanitary Police and Forensic Medicine started at the Prague Medical Faculty in 1785, at first read by extraordinary Professors. German textbooks were used - the same as those in German Universities. The Department of Forensic Medicine and Sanitary Police was established much later in 1807.

The first ordinary Professor of Forensic Medicine and Sanitary Police at Prague Medical School was Joseph Berndt (1808 to 1813). In Prague he wrote his textbook. Its first volume "*Systematisches Handbuch der gerichtlichen Arzneikunde*" (which was on Forensic Medicine) was published in Prague and the remaining two volumes, dealing with the Sanitary Police were published later in Vienna.

In 1821, Mateo José Bonaventura Orfila issued in Paris his lectures (*Leçons de médecine légale*). This publication truly reflects the forensic medicine development of that period but is also enriched by many toxicological problems and their explanations, added by Orfila.

J. L. Casper published his "*Praktisches Handbuch der gerichtlichen Medizin*" in Berlin in 1857. He is now accepted as a founder of Berlin School of forensic medicine and his handbook was widely used by forensic doctors throughout the of Europe in the second half of the 19th Century. Casper incorporated into it all new discoveries from the forensic medicine area and also Pathological Anatomy and regular use of microscopy as well as methods of chemical analyses and reactions.

Eduard Ritter von Hofmann, born on January 27th 1837 in Prague as a son of physician graduated at Prague Charles University in 1861. In the very same year, he started his work in the Department of Forensic Medicine in Prague as an assistant of professor Popel. After Popel's demise in 1864, he supplied lectures in forensic medicine in Czech language until 1869. On September 14th 1869 von Hofmann was named a professor of forensic medicine in Innsbruck. Six years and two days later (1875) he was nominated for a vacated position of Professor of forensic medicine at the Vienna University. Vienna forensic medicine school then started with him and soon it acquired more importance over those in Berlin. He meticulously described microscopic examinations and experimental methods. His "*Lehrbuch der gerichtlichen Medizin*" was a modern textbook, re-printed eight times and translated into French, Italian, Russian and Spanish. Even in recent forensic medicine textbooks, we can feel its influence.

Professor von Machka, a founder of Prague forensic medicine school, published "*Handbuch der gerichtlichen Medizin*" in 1881. This was a collective work of 24 contributing co-authors in four volumes.

Prof. Josef Reinsberg (1844-1930) issued the first forensic medicine textbook written in Czech language in 1883.

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