The departmental chair in Western medicine: tale of the first and foremost

Historical vignette

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The use of the term “chair” in medical literature probably started in the Late Middle Ages with the Italian anatomist Mondino de Liuzzi. History reveals the term’s origin at Bologna, one of the oldest degree-granting universities in Europe. Nobody has been shown in documented literature before Mondino to have reached the level of chair, the zenith of hierarchy in Western scholastic medicine. Mondino is remembered for his preparation of the Anathomia, a compendium for medical scholars, and his description of several anatomical structures and their functions, especially from a forensic perspective. Starting out as a demonstrator displaying various anatomical structures to medical students, Mondino worked his way up to becoming the first documented chair in medical history, and indeed physically occupying the chair. Marking an epoch in academia with his revised method of medical teaching and creative interaction with surgical colleagues, he carved a niche for himself and his department with his illustrious chairmanship. The authors revisit the history of the “chair” as a title and position in the medieval anatomical period and discuss the career of the first and foremost in the documented medical literature. (DOI: 10.3171/2008.6.JNS08106)

Key Words • anatomy • cadaver dissection • departmental chair • Late Middle Ages • Mondino de Liuzzi

Mondino de Liuzzi (1270–1326) is best remembered for his revival of the study of human anatomy in the Late Middle Ages, but few today know that he was the first chair appointed in the history of academic medical departments. The term “chair” had been in existence for a very long time, starting in the Roman and Greek periods. In the early days, chairs were highly regarded and available only to the chosen few in society, especially the religious elite; in the later half of these periods, the chair became more commonplace. The use of the word to mean a departmental head began at the University of Bologna, the leading Italian medical school of the Late Middle Ages, which paved the way for many innovations in medical science (Fig. 1). The University of Bologna was established in 1088 AD as the first degree-granting university in the Western world, famous for its prestigious doctorates. However, the study of medicine gained acceptance in Bologna much later, due to the scholarly work of Taddeo degli Alderotti (1223–1303).12

The University of Bologna was administered by ecclesiastical authority, many of the students were churchmen, and the rector of the University was always a cleric. During its early years, the University of Bologna did not have its own buildings, and classes were held in parts of the cathedral itself. Human dissections were first authorized and performed in Bologna in the Late Middle Ages, after a hiatus of several decades that followed the medical renaissance of the Alexandrian period.6 The extent to which the University was under the jurisdiction of the papacy can be seen vividly in the historical records of the University. In 1292, a bull of Pope Nicholas IV (1227–1292) conferred on all doctors licensed by the archdeacon of Bologna the right to teach not only in the city and in connection with the University of Bologna, but in any university in the world. This is probably the first recorded attempt by a university to make its degrees respected even beyond the limits of the university itself, and it greatly facilitated the dissemination of knowledge to other parts of the world.

The overpowering influence of the clergy is most clearly illustrated by the total cessation of anatomical dissections announced after the Papal Bull of 1299 AD, entitled “De Sepolturis” and issued by Pope Boniface VIII (Fig. 2). This document declared that “all forms
of mutilation and tampering with cadavers, boiling and embalming bones from human bodies, are prohibited, apart from those judicial interventions to ascertain cause of death.” This papal prohibition for mutilating cadavers (and therefore performing dissections) is now presumed to have been decreed to stop the trade of cadaver bones collected from soldiers killed in Holy Land during the crusades and not actually meant to impede dissections. This new edict sharply contradicted the existing decree of the Holy Roman Emperor Frederick II (1194–1250), the stupor mundi (wonder of the world). The Emperor had insisted that medical education must extend over 5 years, followed by 1 year of apprenticeship to an experienced practitioner; he also made anatomical dissection a mandatory part of the medical curriculum and encouraged cadaver dissections.15 Years later, the new sociopolitical changes in the Church, acceptance of medical training, and founding of hospitals provided a conducive atmosphere for improvement in medical learning at Bologna. However, the University continued to be renowned for the study of canon and civil law; it can be inferred that Mondino’s original penchant for medical jurisprudence must have led to his interest in human dissections.

The First Chair

Mondino, the son of a Bolognese pharmacist, later a pupil of Taddeo and thereafter a Professor at Bologna, is regarded as the pioneering teacher of human anatomy in the Late Middle Ages. His initial inclination was to take up the legal profession trying to identify the exact causes of the death of individuals, such as poisoning, infectious diseases, wounds, or other unknown causes. The anatomy department in those days existed primarily to serve the legal department by establishing the cause of death; however, it slowly arose that anatomists not only took part in the human dissections for judicial justification but also for the sake of imparting anatomical knowledge to medical students. Mondino de Liuzzi therefore began his career at the “low end of the totem pole” as a demonstrator, displaying various anatomical parts to the medical students at the University of Bologna. It is fair to say that, although he tried to identify newer anatomical structures, he often blindly followed the teachings of Galen, which are somewhat erroneous in describing functional anatomy. This behavior was in sharp contrast to some of his contemporaries Grosseteste (1168–1253) and Roger Bacon (1220–1292), whose experimentation and hypothetical deductive methods in the physical sciences questioned the work of established authorities.

As Mondino’s professional status escalated, he began to sit in a large chair (Fig. 3) to view and guide the dissection; it is said that he himself never actively participated in the dissections, which were conducted in accordance with the methodology described by Galen. When depicted, Mondino is always shown in an elaborately ornamented chair with a lectern, situated high above the floor on a podium, and requiring steps to reach his chair. He wore long academic robes that concealed his shoes (a symbol of a professor’s sociocultural status) and a headdress befitting his rank and stature, reminiscent of a religious leader, and always read from a large textbook, usually Galen’s work.
Mondino composed the true first practical manual devoted to human anatomy, the Anathomia, in 1316. His emphasis in teaching was that the medical knowledge should be based on reason and direct observation, and he devised a teaching methodology in which dissection of each body was completed in 4 days, 1 day each for the abdomen, chest, and cranium, and the fourth day for the extremities, although Mondino did not extend his own dissections to the limbs. His practical dissection manual described a regionwide pattern of dissection during medical training—abdomen, thorax, cranium, and extremities—in the order of decay of the viscera, in a time when preservation techniques were primordial.
Mondino de Liuzzi—the first medical chair

Mondino’s dissection manual Anathomia was just a 22-page folio that was not printed until 1478 (162 years after he wrote it) and was subsequently reprinted through 39 editions. Although described as based on Galen’s On the Use of Parts, this treatise remained the most popular anatomical reference text in Europe for another 200 years. Interpretation of this text was quite difficult because he used Latin and Arabic terminologies indiscriminately and his morphological descriptions were too concise. Poor and often missing documentation of anatomical findings at the dissection and the paucity of illustrations are cited as the main demerits of Anathomia. However, Mondino’s work stood the test of time until Johannes Gunter translated Galen’s On Anatomical Procedures in 1531 and Andreas Vesalius published De Humani Corporis Fabrica Libri Septem in 1543.

Mondino demonstrated specific techniques of dissection, such as a vertical incision for the abdomen, and described several of the abdominal viscera. He was assisted by 2 women, Allesandra Giglani and Anna Morandi Mahzollin, who prepared wax models and casts of human organs as educational aids. Mondino was also assisted by Otto Agenio Lustrano, who took an active part in the dissections. Students in the department had considerable autonomy and authority invested in them, that “should medical students succeed in ‘obtaining’ a body, they were entitled to insist that it be dissected then and there.” The bodies obtained were those of malefactors who suffered deaths or of tramps and wanderers.

According to Rashdall, by the statutes of the University of Bologna it was mandatory for every medical student to attend an anatomy dissection each year. To ensure personal attention, 20 students were assigned to dissect each male subject and 30 to each female subject. This discrepancy in student numbers for the 2 groups gives an indication of the difficulty in obtaining female bodies for dissections. Walsh reported that Italian universities had a special fund for provision of food and wine for the students and professor to keep up their spirits during the unsavory task of cadaver dissection. This explains both the rigorous discipline imposed on students and the sympathetic fellow-feeling on the part of University authorities. As chair of the University of Bologna, Mondino inaugurated a new era of dissemination of anatomical knowledge, albeit limited by some degree of inaccuracy.

There is a difference of opinion over whether Mondino actually performed the dissections or whether he used the surgical services of barbers, bath attendants, hangmen, animal gelders, and quacks. Controversy also persists over whether he recorded new discoveries when he encountered them, or whether he was always trying to prove the veracity of the teachings of Galen. Bylebyl reported that Mondino performed his own dissections, but Infusino et al. provided details showing that he did not discover anything new. Medici impugns the notion that Mondino’s dissections were limited to a few bodies. Not only his academic work, but even his date and place of birth—whether Florence or Milan—have long been debated. Even Mondino’s first name has been variably read as Mondo or Mondinus, a diminutive for Raimondo or Rimondo.

In contemporary practice, the term “chair,” when used as a noun, refers to a leader or person of authority. When used as a verb, it means “to lead” (for example, a committee, discussion group, conference, or session). In the current usage, an academic chair is the topmost leader of a department. It is evident from the life history of Mondino de Liuzzi that the term “chair of an academic department” gradually evolved as the person received a higher rank with time. The Online Etymology Dictionary states that the term chair has been in use since circa 1225 and is derived from the old French “chaire,” which in turn is derived from the Latin “cathedra.” Thus, a lofty church building containing a papal seat, a cathedra, was named a cathedral, the chair of St. Peter in the Vatican exemplifying the same (Fig. 4). During the medieval period when the clergy had control over University administration, the term chair was used to designate ecclesiastical or feudal stature. In that age, “chair” denoted a figurative sense of authority, like that of a bishop or a professor. Ornate chairs during the Egyptian, Greek, Roman, and Chinese periods were generally reserved for kings and other elite government members, as depicted in sculptures, paintings, monuments, and bas-reliefs (Fig. 5). The chair was theirs as an article of state and dignity rather than of ordinary use until the Renaissance period in Europe. Today the chair is a symbol of authority in the British House of Commons and other similar elected bodies. Mondino, however, became the first chair of an academic medical department in an era when religion and medical education were entwined inseparably.

Conclusions

Mondino supervised the first systematic public dis-
section of a human body, wrote the first accepted manual on practical human dissection, and became the chair of his department, a true first in medical history. Mondino is also remembered for excellence in his area of work, revitalization of medical education, path-breaking scientific publications, and collaboration with surgical colleagues—all attributes of a good departmental chair. His invaluable contributions to the field of medicine in the Late Middle Ages have made a great impact on the modern scientific tradition, and we can now trace the term “chair of the department” from the days of Mondino to the present.

Disclaimer

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References


Fig. 5. An ancient representation of a chair, on the tombstone of the shoemaker Xanthippos, ca. 430–420 BC. From: the Townley Collection, British Museum, London.