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ΙΣΤΟΡΙΑ ΤΗΣ ΙΑΤΡΙΚΗΣ

The development of cardiology in the 19th century at the Paris School of Medicine

In the late 18th and early 19th centuries, Jean Nicolas Corvisart (1755–1821) played a pivotal role in initiating major advances in cardiology, preparing the ground for the emergence of clinical medicine in the 19th century. The rise of the anatomoclinical method at the Paris School of Medicine decisively contributed to the establishment of cardiology as a distinct medical specialty. Clinical examination techniques were expanded through the reintroduction of percussion, promoted by Corvisart, and auscultation with the stethoscope, invented by René-Théophile-Hyacinthe Laennec (1781–1826).

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G. Papastavrou,[1]
S. Michaleas,[1]
I. Dimitriadis,[1]
G. Marinos,[2]
M. Karamanou[1]

[1]Department of History of Medicine and Medical Ethics, Medical School, National and Kapodistrian University of Athens, Athens
[2]Department of Hygiene, Epidemiology and Medical Statistics, Medical School, National and Kapodistrian University of Athens, Athens, Greece

Η ανάπτυξη της Καρδιολογίας τον 19ο αιώνα στη Σχολή Ιατρικής των Παρισίων

Περίληψη στο τέλος του άρθρου

Key words

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1. INTRODUCTION

The history of the Paris School of Medicine can be traced back to the early 13th century, when the University of Paris was formally established in 1215, with medicine being officially taught from 1274.[1] Medieval medicine was largely based on the doctrines of Hippocrates (460–377 BC) and Galen (129–199 AD). Alongside the renowned medical schools of antiquity and that of Salerno –known as Civitas Hippocratica– medicine in the Middle Ages was also practiced by lay healers. Bloodletting remained the predominant therapeutic practice, as physicians believed it purified the body of harmful substances[2] (fig. 1).

The Hôtel-Dieu hospital in Paris, whose origins date back to the 7th century and which was officially founded in 829, became one of the most important medical institutions in Europe.[3] The 16th century saw significant advances in anatomical discoveries, while the 17th century was marked by skepticism towards William Harvey's (1578–1657) discovery of the circulation of blood, particularly by Jean Riolan (1577–1657) and Guy Patin (1600–1672).[4,5] In the 18th century, Antoine-Laurent Lavoisier (1743–1794) contributed crucially to physiology by elucidating the mechanisms of respiration.[6]

Among the Parisian hospitals, the Hôtel-Dieu became a hallmark of French medicine in the 19th century. Bicêtre hospital was notable for Philippe Pinel's (1746–1826) humanistic treatment of the mentally ill. The Saint-Louis hospital was founded during epidemics and specialized in infectious diseases, while the Salpêtrière hospital initially functioned as an institution for beggars and mentally ill patients, later also serving as a prison for condemned women.[7,8]

Figure 1. The bloodletting.

2. THE MAIN REPRESENTATIVES OF CARDIOLOGY AT THE PARIS SCHOOL OF MEDICINE IN THE 19th CENTURY

Jean Nicolas Corvisart marked the beginning of modern cardiology with his 1806 work Essai sur les maladies organiques du coeur et des gros vaisseaux (essay on organic diseases of the heart and large vessels), considered the first modern cardiology textbook. In this work, he introduced the concept of the "cardiac root", classified aneurysms as either passive or active, and distinguished between various types of ventricular hypertrophy. He also provided a detailed description of the stages of heart failure, described pericarditis, and attempted to differentiate between pulmonary and cardiac causes of dyspnea. In 1808, he revived the forgotten method of chest percussion, originally invented by Johann Leopold Auenbrugger (1722–1809).[9,10]

Gaspard-Laurent Bayle (1774–1816) described a rare case of scirrhous cardiac cancer involving both atria and the interventricular septum.[11] René-Théophile-Hyacinthe Laennec (1781–1826), though primarily associated with pulmonology, made a lasting contribution to cardiology through his invention of the stethoscope. In 1819, in his two-volume classic *"De l' auscultation médiate"*, he provided detailed descriptions of auscultatory findings in pulmonary and cardiac diseases, including mitral stenosis, cardiac hypertrophy, and congenital heart anomalies.[12,13]

Jean-Baptiste Bouillaud (1796–1881) further advanced cardiology by demonstrating the relationship between heart valve lesions and acute rheumatic fever. In 1835 he described heart murmurs, and in 1840 published his Traité clinique du rhumatisme articulaire, linking endocarditis to fever in acute rheumatism.[14,15] Gabriel Andral (1797–1876), professor of pathology and medical historian, was among the first to record cases of cardiac cancer, reporting on patients with encephaloid tumors of the heart.[16]

Félix-Michel-Charles Peter (1824–1893) became re-

nowned for his work on mitral stenosis, tuberculosis, and streptococcal infections.[17] Pierre-Carl Édouard Potain (1825–1901) made extensive contributions to cardiac physiology and semiology (fig. 2). He analyzed heart sounds, described the gallop rhythm, and identified splitting of the second heart sound during inspiration. He also described the mitral opening snap and various arterial and venous murmurs. In collaboration with Jules-Étienne Marey (1830–1904), Potain developed the sphygmograph to record arterial and venous pulses and later co-developed the sphygmomanometer for measuring blood pressure (fig. 3).

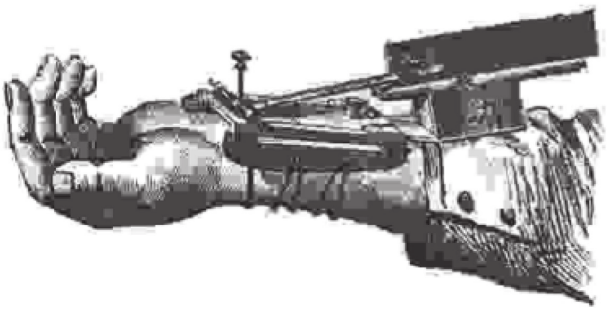

Figure 3. Marey's sphygmograph.

Figure 2. Pierre-Carl Édouard Potain (1825–1901).

Marey himself became a central figure in cardiology through his studies of cardiac mechanics, vascular elasticity, blood flow, and myocardial electrical activity.[1] Alphonse Laveran (1845–1922) described myocardial infarction because of coronary thrombosis in 1877 – an entirely new concept at the time.[13] Antoine-Bernard-Jean Marfan (1858–1942) described in 1896 the syndrome that now bears his name, identifying arachnodactyly, ocular dislocation, cardiovascular anomalies, and aortic rupture as characteristic features.[18]

3. CONCLUSIONS

The Paris School of Medicine played a decisive role in the birth and development of cardiology in the 19th century. Building on the anatomoclinical method, French physicians introduced new diagnostic techniques, such as percussion and auscultation, and established clinical-pathological correlations that would define modern cardiology. From Corvisart and Laennec to Potain, Marey, and Marfan, Paris became the epicenter of cardiological innovation, shaping the specialty into a recognized medical discipline.

ΠΕΡΙΛΗΨΗ

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Γ. ΠΑΠΑΣΤΑΥΡΟΥ,[1] Σ. ΜΙΧΑΛΕΑΣ,[1] Ι. ΔΗΜΗΤΡΙΑΔΗΣ,[1] Γ. ΜΑΡΙΝΟΣ,[2] Μ. ΚΑΡΑΜΑΝΟΥ[1]

[1]Εργαστήριο Ιστορίας της Ιατρικής και Ιατρικής Ηθικής, Ιατρική Σχολή, Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών, Αθήνα, [2]Εργαστήριο Υγιεινής, Επιδημιολογίας και Ιατρικής Στατιστικής, Ιατρική Σχολή, Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών, Αθήνα

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Κατά τα τέλη του 18ου και τις αρχές του 19ου αιώνα ο Jean Nicolas Corvisart (1755–1821) έθεσε τις βάσεις για την εξέλιξη της Καρδιολογίας, ενώ η εμφάνιση της ανατομοκλινικής μεθόδου στην Ιατρική Σχολή των Παρισίων διαμόρφωσε καθοριστικά τη νέα ειδικότητα. Η κλινική εξέταση εμπλουτίστηκε με την επανεισαγωγή της επίκρουσης, υπό την ώθηση του Corvisart, και την ανακάλυψη του στηθοσκοπίου από τον René-Théophile-Hyacinthe Laennec (1781–

1826). Στον 19ο αιώνα, προσωπικότητες όπως ο Bouillaud, ο Andral, ο Potain, ο Marey, ο Laveran και ο Marfan συνέβαλαν καθοριστικά στη μελέτη των καρδιακών νόσων, από τις βαλβιδοπάθειες και τις ρευματικές βλάβες έως τις νεοπλασίες και τις συγγενείς ανωμαλίες. Το Παρίσι αποτέλεσε το επίκεντρο της καρδιολογικής έρευνας και εκπαίδευσης, προσφέροντας τις βάσεις για τη σύγχρονη Καρδιολογία.

Λέξεις ευρετηρίου: Jean Nicolas Corvisart, Jules-Étienne Marey, Ιστορία της Καρδιολογίας, Pierre-Carl Édouard Potain, René-Théophile-Hyacinthe Laennec

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Corresponding author:

S. Michaleas, Department of History of Medicine and Medical Ethics, Medical School, National and Kapodistrian University of Athens, Athens, Greece
e-mail: sp.michaleas@gmail.com