Semenenko Olena,

Kharkiv National Medical University, Kharkiv

**CONTRIBUTION OF ANDREAS VESALIUS INTO ANATOMY**

Andreas Vesalius laid foundation of modern anatomy by his works. It won’t be an understatement to say, that he made a revolution in medicine back in his time. Not only he discovered and described numerous bones, muscles, vessels, nerves and organs of the human body. But he also dared to correct the most unbeatable medical authority of the Middle Ages Galen, whose works were considered dogmatic in medicine of that period. More over Vesalius changed the whole methodology of teaching medicine by being the first scientist, who combined lectures, demonstration on corpses and dissections in his teaching practice.

The aim of this abstract is to review Andreas Vesalius’ biography and highlight his most creditable achievements in the field of medical science [1].

Andreas Vesalius was born on December 31, 1514 in Brussels, Belgium, in a family of physicians. His grandfather was a family physician, while his father was a pharmacist. Both of them had served the Emperor of the Holy Roman Empire [2].

In 1529 Vesalius entered the Catholic University of Leuven to study arts. There he became interested in medicine. In 1533 Vesalius entered the Faculty of Medicine of the University of Paris, which was one the most well-known medical schools at the time. In 1536 he returned to the Catholic University of Leuven, where he spent one year. Finally in 1537 Vesalius went to a place, where he made his most significant discoveries, the University of Padua. There he received his medical degree and was offered a position of Anatomy and Surgery professor, which he occupied until 1543 [1].

In Padua Vesalius wrote his most famous work “De humani coporis fabrica libri septem”, which overthrown the whole understanding of human anatomy. It was based on careful study of Galen’s works and Vesalius own experience learnt from dissections, which he performed himself. The latter was unthinkable as for a medieval professor, who wasn’t supposed to approach to a corpse. The book was finished in 1543, and consisted of seven volumes. There, Vesalius proved that Galen never performed human dissections. All his ideas were based on theoretical knowledge and dissections of apes and other animals, whose body structure was significantly different from the human one [2].

In 1544 Vesalius became a court physician of Emperor Charles V [1].

He continued working on improvement of his fundamental work. In 1555 the second edition of “De humani coporis fabrica libri septem” saw the light. The central idea of the book was that human body could be learnt and understood through human dissections and no other way. The revised edition contained description of uterus, fetus, heart (Vesalius discovered and described interventricular septum, the presence of which in a human body was denied by Galen), venous valves and etc [2].

In 1556, Charles V abdicated his throne and Vesalius started serving to the new King Phillip II [1].

The death of Vesalius is still controversial. In 1564, the famous scientist made a pilgrimage to the Holy Land. Between the reasons of such an unpredictable decision could be threats from the Inquisition. However, Vesalius was going to return to his work at the University of Padua according to a letter sent to his great disciple Fallopius. On his way back, in 1564, Vesalius’ boat got into a storm, and though he managed to survive, but he fell ill. The ship eventually landed on the island of Zante (Greece) and soon after Andreas Vesalius died [2].

The epitaph on his tomb says: "The genius lives forever, everything else is mortal - Andreas Vesalius of Brussels" [1].

The most important contribution Vesalius made in medicine was transition from studying anatomy on the basis of ancient authorities to making human dissections and relying exceptionally on experience.

**Reference:**

1. Zampieri F, ElMaghawry M., Zanatta A. Andreas Vesalius: Celebrating 500 years of dissecting nature. URL: <https://www.ncbi.nlm.nih.gov> (дата звернення 02.10.19);
2. Mesquita E.T., Souza Júnior C.V., Ferreira T.R. Andreas Vesalius 500 years--A Renaissance that revolutionized cardiovascular knowledge. URL: <https://www.ncbi.nlm.nih.gov> (дата звернення 02.10.19);