



The giant anatomist, whose value is later understood: Bartolomeo Eustachi

Saliha Seda Adanır¹ · İlhan Bahşi¹

Received: 11 February 2019 / Accepted: 22 February 2019 / Published online: 5 March 2019
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His life

Bartolomeo Eustachi (latinized as Eustachius) (1513?–1574) (Fig. 1) is one of the most important scientists who contributed to Renaissance medicine and one of the founders of the anatomy. He was a good physician and linguist. There is little knowledge about Eustachi's life. Eustachi studied medicine in Rome and Padua. He taught anatomy and performed autopsy and dissection in Rome. Eustachio was a professor of anatomy at the Collegia della Sapienza. Although Eustachi lived at the same time as Andreas Vesalius, he had never worked with him [1, 2].

His works

Eustachi had presented to anatomy, development, and function of teeth in his book published in 1563. He is the first who described the structure of the dental pulp, periodontal membrane, thoracic duct, abducens nerve, and adrenal glands [1–3]. He described the ligaments of the malleus and stapes. Also, the term isthmus, describing the portion of the thyroid gland connecting its two lobes, was first used by him [2].

In 1552, Eustachi prepared 47 anatomical drawings on copper plates. Although he prepared these drawings for use to the book called *De dissensionibus ac controversiis anatomicis*, it has never been published [1]. Eight of 47 plates show human skeletons and muscles [4]. Eustachi used these plates in an anatomy work that he wrote to describe the

kidneys, vessels, and Eustachian valve. After he died, the other plates disappeared, and they appeared when they were published 150 years later. These drawings, although not the first anatomy drawings made on plate, indicate Eustachi's careful observations and the ability in anatomy [1, 2].

In the eighteenth century, the papal physician Giovanni Maria Lancisi prepared the whole text by adding explanations to the plates that had not been published before. Though Eustachi's drawings were not as elegant as Vesalius's work in artistic terms, they were sometimes more accurate [1, 4]. Shklar and Chemin [3] stated that his anatomical works were in many ways more elaborate and comprehensive than those of Vesalius, but some works were not known until publication in 1722. Eustachi would undoubtedly be regarded as the



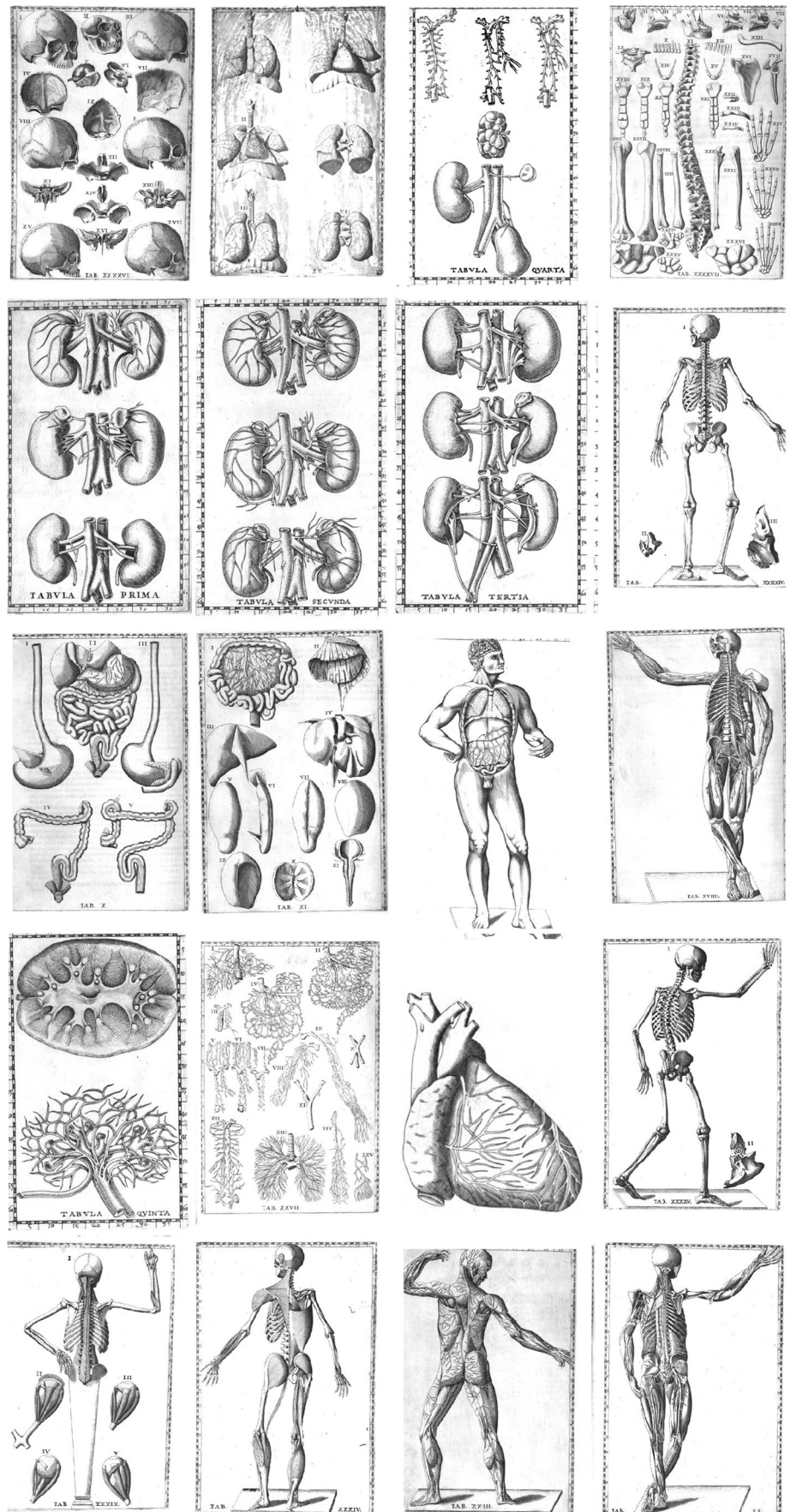
Fig. 1 Bartolomeo Eustachi, which can be found at https://en.wikipedia.org/wiki/Bartolomeo_Eustachi#/media/File:Bartolomeus_Eustachius.jpg. Accessed 24 Jan 2019

✉ Saliha Seda Adanır
seda.adnr93@gmail.com

İlhan Bahşi
dr.ilhanbahsi@gmail.com

¹ Department of Anatomy, Faculty of Medicine, Gaziantep University, 27310 Gaziantep, Turkey

Fig. 2 Some drawings in the book named *Tabulae anatomicae Bartholomaei Eustachi quas a tenebris tandem vindicatas*



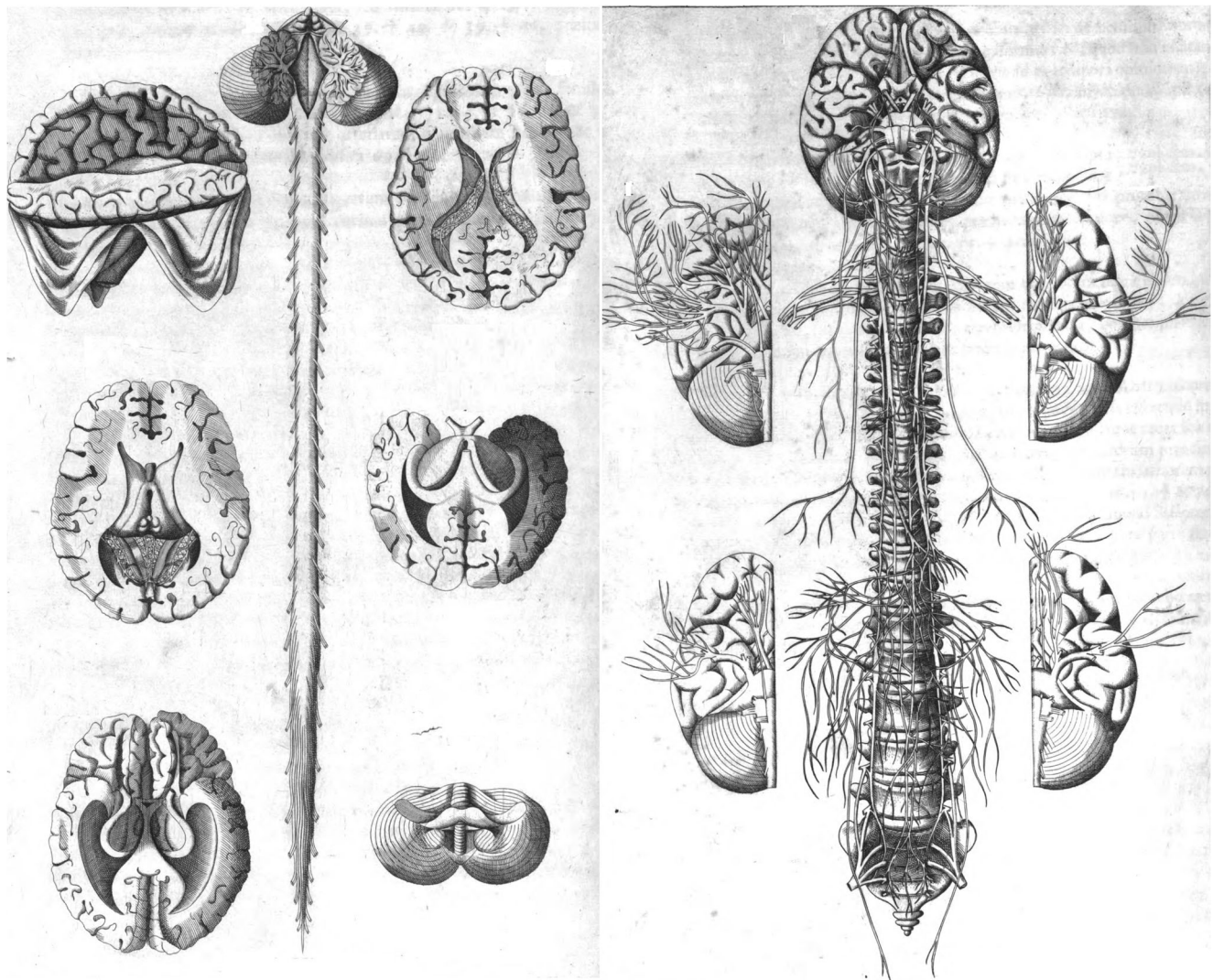


Fig. 3 and cover The drawings of the nervous system in the book named *Tabulae anatomicae Bartholomaei Eustachi quas a tenebris tandem vindicatas*

founder of modern anatomy with Vesalius if they were published at the time the plates were made [1].

Lancisi, along with eight plates, appeared in 1564, combined the other plates and wrote a book in 1714, which he described as *Tabulae anatomicae Bartholomaei Eustachi quas a tenebris tandem vindicatas*. Although it lacks the text Eustachi planned, the plates alone keep him in a distinctive position on history of anatomy. These plates include muscles, bones, abdominal structure, thorax, vascular system, base of the brain, and sympathetic nervous system (Figs. 2, 3 and cover) [1]. The loss of Eustachio's anatomical studies for more than 100 years can be considered an important obstacle in development of anatomy [3].

Related eponyms

There are many eponyms mentioned by his name [1, 5].

Eustachian catheter: the catheter used for catheterization of the middle ear from the Eustachian tube

Eustachian tube: auditory tube

Eustachian valve: valve of the inferior vena cava

Eustachian amygdala: tubal tonsil

Canal for the Eustachian tube: semicanal for the auditory tube

Eustachian muscle: tensor tympani muscle

Compliance with ethical standards

Conflict of interest None

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