

Guido da Vigevano and the first human neuroanatomical figures

Guido da Vigevano e as primeiras figuras neuroanatômicas humanas

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The interest on anatomy has a long history, and the dissection of varied kinds of animals was performed by outstanding naturalists and anatomists along the ages.

The philosopher and naturalist Aristoteles (4th century BC) must be cited for his studies in this field, followed by many others. However, the name of Claudius Galenus of Pergamon (2nd -3rd century AD) stands out as one of the most important anatomist ever, with his findings lasting for over one and a half millennium.

The forbidden dissections of human corpses, mostly for religious reasons, was overruled for a short time in Alexandria (3rd-4th century BC), and the physicians and anatomists Herophilus of Chalcedon and Erasistratus of Chios had the opportunity to perform studies of the human body. Unfortunately, most of their findings were lost, only a few remaining for posterity. Such prohibition lasted until the late Middle Ages, when dissections of human corpses were allowed again.^{1,2}

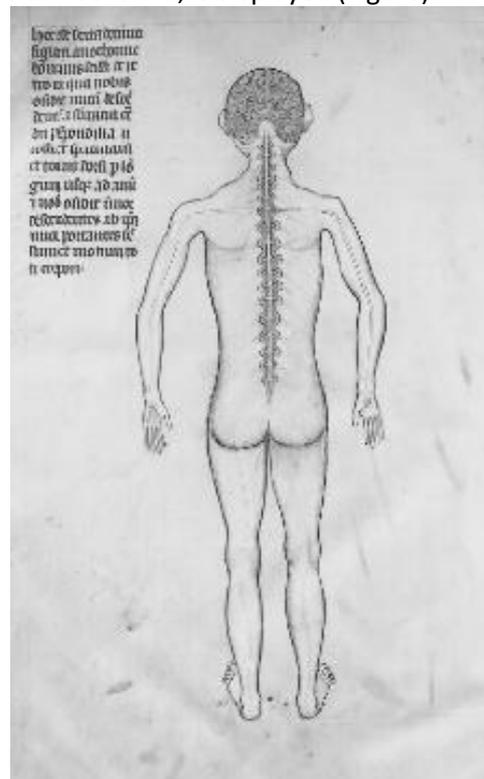
Mondinus de' Liuzzi (ca 1270–1326) was the anatomists who produced the first known anatomical book, based on dissection of human cadavers, the *Anathomia Mondini* (1316), printed much later (1478), without illustrations.²

Figure. Plate XVI from the *Anathomia* of Guido da Vigevano (1345) showing the back of a dissected human corpse in a standing position, displaying the brain, the spinal cord, and the roots of the spinal nerves.²⁻⁴

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Guido da Vigevano (1280–1349), his contemporaneous and pupil, followed him. He also performed human dissections, and provided the first anatomical book with illustrations, the *Anathomia designata per figuras* (1345), with 24 plates, of which 6 have been lost, and of the 18 remaining, 6 plates were about neuroanatomy.²⁻⁴ These illustrations, although schematic and rudimentary, can be considered to be the first neuroanatomical drawings in the history of neuroscience.²

Here, one of the illustrations, plate XVI of Vigevano's *Anathomia*, is displayed (Figure).



CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

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REFERENCES

1. Olry R. Medieval neuroanatomy: the text of Mondino dei Luzzi and the plates of Guido da Vigevano. *J Hist Neurosci* 1997;6:113-123. DOI: 10.1080/09647049709525696
2. Di Ieva A, Tschabitscher M, Prada F, Gaetani P, Aimar E, Pisano P, Levi D, Nicassio N, Serra S, Tancioni F, Arosio M, Rodriguez Y Baena R. The neuroanatomical plates of Guido da Vigevano. *Neurosurg Focus* 23 (1):E15, 2007. DOI: 10.3171/FOC-07/07/E15
3. Rengachary SS, Colen C, Dass K, Guthikonda K. Development of anatomic science in the late Middle ages: the roles played by Mondino de Liuzzi and Guido da Vigevano. *Neurosurgery* 2008;65:787-794. DOI: 10.1227/01.NEU.0000324991.45949.E4
4. Vigevano, Guido da. *L'Anathomia designata per figuras*. 1345. [Retrieved from (08-08-2020): <https://bvmm.irht.cnrs.fr/iiif/314/canvas/canvas-185973/view>]