



Review

Michael Servetus (1511–1553): Physician and heretic who described the pulmonary circulation

Anand Bosmia^a, Koichi Watanabe^{a,b,*}, Mohammadali M. Shoja^{a,b,c}, Marios Loukas^d, R. Shane Tubbs^{a,b}

^a Section of Pediatric Neurosurgery, Children's Hospital, Birmingham, AL, USA

^b Division of Neurological Surgery, Department of Surgery, University of Alabama at Birmingham, Birmingham, AL, USA

^c Medical Philosophy and History Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

^d Department of Anatomical Sciences, School of Medicine, St. George's University, West Indies, Grenada

ARTICLE INFO

Article history:

Received 1 June 2012

Accepted 9 June 2012

Available online 28 June 2012

Keywords:

History

Spain

Anatomy

Pulmonary circulation

Heart

Religion

ABSTRACT

The purpose of this paper is to provide an overview of the life of the physician and theologian Michael Servetus and to discuss his analysis of the pulmonary circulation. Writers have praised Servetus for his commitment to educating his colleagues about what he heralded as the truth, and criticized him for his perceived arrogance. Servetus made contributions to the fields of geography, astrology, theology, and medicine. This paper refers to the translation of a portion of Servetus' book *Christianismi Restitutio* by Charles D. O'Malley.

Published by Elsevier Ireland Ltd.

Michael Servetus (Fig. 1) demonstrated a passion for learning and instruction in various academic fields, including medicine and theology [1]. However, some writers consider him to have been an arrogant man. Gilder writes: "A study of these [O'Malley's] translations confirms the view that Servetus was a difficult man in his personal relations. If ever a man may be said to have brought a violent death on himself, it was this obstinate Spaniard" [2]. Gilder argues that passages from O'Malley's translations suggest Servetus to have been a contentious and vituperative man [2]. However, Servetus is also praised for his accomplishments. Cattermole writes: "Servetus must be applauded for taking a stand against tradition" [3]; Trueta writes: "...by the example he offered in confronting human intolerance he has become even more than a martyr of the old religious quarrels – a symbol for the modern Western man" [4].

Michael Servetus was born in 1511 in Villanueva, Spain [1]. Villanueva is a small village in the area of Aragon adjoining Catalonia, and is referred to as Vilanova de Sixena in its original Catalan spelling and as Villanueva de Sigena in Spanish [4]. Cattermole gives the location and date of Servetus' birth as "Tudela, Navarre, on 20 September 1511" and site of upbringing as Villanueva [3]. However, Trueta writes Servetus said during his trials in Paris and Vienne that he had been born in Tudela, Navarre, but if he had stated Vilanova de Sigena as his place of birth, he would have been identified as Michael

Servetus. Furthermore, Barrios contributed to locating Servetus' birthplace by finding in Sigena the scriptures signed by Servetus' father, who in 1511, the year of Servetus' birth, was signing as the notary of Sigena [4].

Trueta offers a brief summary of the family of Michael Servetus: "The father of Servetus, Anton Servet or Serveto, was a notary who worked at Sigena and who had married the Aragonian lady Catalina Conesa. She was the daughter of a nobleman, Don Pedro Conesa, and of Beatriu Çaporta. From this couple three sons were born – Michael the physician... Peter a notary, and John who went into the priesthood and became rector of the church of Poliñino" [4].

Cattermole writes that Servetus entered the University of Saragossa [3], but Trueta argues that no evidence of his enrollment at the University of Saragossa exists [4]. Servetus left Spain for Toulouse at the age of 14 years in 1526 to study law, but afterward began to study the Bible after becoming interested in theological discussions of the Protestant Reformation [3,4]. Trueta contends that Servetus was probably influenced by *Theologia Naturalis Liber Chreaturorum*, a work by Ramon de Sibiude (Sabonde), "a scholar born in Barcelona in the second part of the fourteenth century, who left Catalonia to teach medicine and theology at the University of Toulouse until he died in 1432" [4]. In this book, Sabonde explains how Nature reflects the rational explanation of God's revelation of Himself. Servetus would later on provide a description of the pulmonary circulation in *Christianismi Restitutio* in support of his theological beliefs concerning the Holy Spirit. Trueta contends that Sabonde's influence inspired Servetus to reinterpret Biblical scripture, thereby placing Servetus on the path toward persecution as a heretic [4].

* Corresponding author at: Section of Pediatric Neurosurgery, Children's Hospital Birmingham, AL 35233, USA.

E-mail address: koichiwatanabeprs@gmail.com (K. Watanabe).



Fig. 1. Michael Servetus. We obtained the permission of using this picture from © BIU Santé (Paris).

In 1529, following the completion of his studies in Toulouse, Servetus returned to Barcelona, where he met the Franciscan Juan de Quintana, a Majorcan who became the Confessor of the Holy Roman Emperor Charles V; Servetus worked for Juan de Quintana as a private secretary and became a follower of the Imperial Court [3,4]. Servetus visited Italy, attended the coronation of Charles V by Pope Clement VII in Bologna, and was present at the Diet of Augsburg in 1530 [4]. Cattermole notes that “by 1530 Servetus had become disillusioned by the immortality and inefficiency of the papacy and church” and “traveled to Basel where he discussed theology with the reformer Oecolampadius”, with whom he disputed the Christian doctrine of the Trinity [3]. In response to the opponents he encountered while discussing theology with Swiss Reformers, Servetus published *De Trinitatis Erroribus* in 1531 in Hagenau [4]. Servetus thus demonstrated at a young age an assertive intellect that he did not silence on occasions of disagreement with proponents of the status quo.

The circumstances of his death precipitated from his writings on Christian theology, namely *De Trinitatis Erroribus*, *Dialogorum De Trinitate libri duo* (1532), and *Christianismi Restitutio* (1553), which brought him into conflict with both the Catholic Church and John Calvin as a result of their heretical content [1–3]. Following the publication of *Dialogorum*, Servetus began a “21-year life under the pseudonym of Michael Villanovanus” [2] and “fled to Lyon where he found work as a proof-reader for the printing firm of the Trechsel brothers” [3]. The Trechsels had Servetus annotate and prepare a re-edition of Ptolemy’s *Geography*, which was released in 1535 [4].

Servetus’ work at the Trechsel brothers’ printing firm led to his career as a scholar of medicine. Before Ptolemy’s *Geography* was published, Servetus spent time in Paris and studied anatomy at the Collège de Calvi [4]. The Trechsel brothers printed works by the physician Symphorien Champier, against whose opponent, Fuchs, Servetus

authored the book *In Leonardum Fuchesium Apologia* in 1536; this book was Servetus’ first medical work and was expanded in 1537 in the book *Syruporum Universa Ratio*. *An Apology against Fuchs* demonstrated Servetus’ knowledge of medical writings by Hippocrates, Galen, Dioscorides, Plinius, and Avicenna. Champier encouraged Servetus to study medicine at the University of Paris, at which Servetus enrolled on March 24, 1538 [3,4]. There is disagreement between O’Malley and Trueta on the subject of Servetus’ anatomical training. O’Malley contends Servetus could not have been working in anatomy with the physician Guinter of Andernach until 1538, but Trueta argues *Syruporum Universa Ratio* and Andernach’s *Institutionum Anatomicarum...libri quatuor* indicate that Servetus was acquainted with Parisian anatomists, such as Andrea Vesalius and Andernach, before the end of 1537 [4]. Indeed, others contend that Servetus was a pupil of Jacques Dubois (1478–1555), also known as Sylvius, and the assistant of Joannes Guinter (1505–1574) [5].

Servetus’ experience at the University of Paris and subsequent life in Vienne evidenced his passion and contentiousness as an academic. At the University of Paris, Servetus studied mathematics and medicine. He never received a medical degree, but he became a lecturer in mathematics and astronomy. Servetus started to lecture about astrology and published *Apologetica disceptatio pro Astrologia* in 1538. The dean, Tagault, ordered him to cease giving lectures on astrology. Servetus refused, but was acquitted in civil court. He subsequently published an *Apologetic discourse in favor of astrology and against a certain physician*. Servetus was summoned to a trial on March 18, 1539; he was made to agree not to teach astrology again and to accept corrections to his book. Servetus then fled to Charlieu and practiced medicine there for three years. Pierre Palmier, the Archbishop of Vienne, who had supported Servetus as a lecturer at the University of Paris, convinced the Trechsel brothers to set up their printing press in Vienne, and Servetus joined them in Vienne, where he lived for the rest of his life [3,4]. In Vienne, he practiced as a physician attached to the household of Palmier and published an annotated Bible in 1541 and a second edition of Ptolemy’s *Geography*, which he dedicated to Palmier, in 1542 [4].

During his time in Vienne, Servetus found a dangerous antagonist in John Calvin. Cattermole writes that “Servetus sought merely to inform Calvin of his faults under the pretext of learning from the master” [3]. Servetus sent Calvin an early draft of *Christianismi Restitutio* in 1546, and took offense when Calvin did not reply, thereafter “sending rude letters and copies of Calvin’s *Institutes* with insulting marginalia” to Calvin. Calvin eventually came to learn that Michael Servetus and Michael Villanovanus were the same person, and on April 4, 1553, Servetus was arrested in Vienne [3]. Cattermole writes that it is uncertain whether Calvin denounced him to Catholic authorities in Vienne. Servetus was arrested in Vienne, but escaped from prison with the help of outsiders three days after his trial began. He entered Geneva on his way to southern Italy, but on August 13, 1553, he was recognized as he went to church, arrested, and prosecuted by Calvin, his trial lasting several weeks and finding him guilty of spreading heresies, leading an immoral life, and disturbing the peace [3,4]. Servetus’ rejection of the Christian principle of the Trinity led to his execution [5], and he was burnt alive at the stake at Champel, a suburb of Geneva, on October 27, 1553 [2].

Thousands of copies of *Christianismi Restitutio* had been printed at the time of Servetus’ execution. Many were burned in Vienna. Three copies of Servetus’ *Christianismi Restitutio* survived. The National Library of France has one of these copies, which was first acquired by an English doctor named Richard Mead, who served as a doctor to King George II and as a chief of the medical staff of Théodore Tronchin (1701–1785). Six years before the start of the French Revolution in 1789, the Royal Library obtained the manuscript. Since 1698, the Library of the University of Edinburgh possesses the second copy. The National Library of Vienna (Austria) holds the third copy. This copy was used to issue a new edition from the German Unitarian scholar Cristopher Gottlieb von Murr, published in 1790 in Nuremberg [5,6].

Download English Version:

<https://daneshyari.com/en/article/5975243>

Download Persian Version:

<https://daneshyari.com/article/5975243>

[Daneshyari.com](https://daneshyari.com)