



## Summary :

Physician and writer of medical works. He was born around 525 in Tralles and died in Rome around 605. He is considered the most important Byzantine doctor. He established the clinical study of herbal medicines and made a major contribution to the development of pharmacology. His work had a great impact both in his time and later on; it was also translated into Latin, Jewish and Arabic. His therapeutic methods spread widely and were kept in use until recently.

## Date and Place of Birth

ca 525 AD, Tralles

## Date and Place of Death

ca 605 AD, Rome

## Main Role

Physician

## 1. Biography

Alexander was born around 525 in [Tralles](#) and died in Rome around 605. He became a prominent physician, while at the same time he wrote medical treatises and works on the medicinal properties of plants. He was the youngest son of a doctor called [Stephen](#), whose family made significant contributions to the development of sciences. He had four brothers: the mathematician and architect [Anthemios](#), the doctor Dioskoros, the mathematician [Metrodorus](#) and the jurist [Olympios](#). He studied at his birthplace, which is important, as Alexandria was the centre for medical studies at the time.<sup>1</sup> He started his studies by his father and continued by a famous physician of the time, whose name remains unknown. However, it is known that the latter's son was the doctor Cosmas, with whom Alexander maintained a friendly relationship throughout his life. When he completed his studies, Alexander travelled to Armenia, Thrace, Dalmatia, Cyrenaica, Italy, Galatia and Spain before he settled in Rome, where he practised medicine. He was a very famous doctor as well as a pharmacologist and botanologist. He possibly worked as a teacher as well.<sup>2</sup> It seems that he stopped practising medicine at an advanced age. According to him, he was quite old when he started writing his medical treatises. His major work is a collection of discourses under the title «Treatise on the Pathology and Therapeutics of Internal Diseases». His work, the result of his long-term experience and original research, made him the most important physician of the [early?] Byzantine period. His therapeutic methods spread widely and were kept in use until recently.

## 2. Writings

The Therapeutics compilation consists of twelve books. Alexander dedicated the work to his friend Cosmas, the son of his teacher. It is a sort of an encyclopedia of pathology combined with therapeutic methods for various internal diseases. The Therapeutics analyse a wide range of diseases divided into thematic sections, such as the diseases of the head and the brain. The book «On Fevers»<sup>3</sup> was probably originally written independently, but was later included in the compilation. The books on [helminths](#) (*De Lumbricis*) and on diseases of the eyes are written in epistolographic form. The sections on ophthalmologic diseases, pleurisy and dysentery are very comprehensive. Mental diseases also examined in detail. The twelfth book is an original discourse on podagra. Finally, one of the books of the collection talks about herbs and pharmacology, including a large number of medicinal herbs, from both the Mediterranean and the East. This book is also considered the first clinical study on medicinal herbs. The thorough knowledge of the herbal wealth of the East could be based on information Alexander had collected from Cosmas the Indicopleustes, since, according to a tradition, Cosmas was acquainted with the family of Alexander.<sup>4</sup>

## 3. Exercise of medicine

Unlike other physicians of the same period, such as Aetius of Amida, who had a theoretical approach in his writings, Alexander dealt



with practice and the administration of medication. He had a thorough knowledge of the work of Galen, whom he considered the greatest authority in medicine. He put into practice several conclusions of [Galen](#), although he did not hesitate to criticise his diagnoses and to complete a lot of his prescriptions. As a doctor, Alexander became famous for the meticulous methods of diagnosis and treatment. He administered medication according to the principle of *contraria contrariis*, that is, the principle of the opposites, based on his belief in the therapeutic power of nature. He believed that a regular diet in the form of a 'repeated therapeutic treatment' overrides therapy. He favored mild methods and baths, while he avoided strong medicines. In several cases, he would recommend phlebotomy, cathartics and diuretics. He was the first doctor to administer ferrum (iron) for internal treatment. Finally, Alexander was opposed to direct surgical operation and the excessive use of medicines because he considered prevention a doctor's main duty.<sup>5</sup>

#### 4. Evaluation

Alexander of Tralles is considered the most important Byzantine doctor. His work had a great impact on both his contemporaries and subsequents and was translated into Latin, Jewish and Arabic. The main disadvantage of his work is his belief in the therapeutic power of talismans and exorcisms. Alexander believed that a doctor should make use of all possible means in order to treat his patients. However, it is worth mentioning that demonology and sympathetic magic (the idea that «material demons» acted due to their «sympatheia», affinity, for both therapeutic and poisonous herbs) generally described the medical thought of the time. The adoption of those opinions by Alexander probably contributed to the wide acceptance of his work in the East in the subsequent centuries. The Byzantine and Arab doctors used his work as a source in their studies. According to contemporary historians of medicine, Alexander was famous for his practical experience, medical attitude towards earlier doctors and comprehensive descriptions. These properties differentiate him from his contemporary writers of medical discourses, who simply garnered information. In general, Alexander is considered to be closer than the rest of the Byzantine doctors to the modern concept of medicine.<sup>6</sup>

1. Duffy, J., «Byzantine medicine in the sixth and seventh centuries: Aspects of teaching and practice», *Dumbarton Oaks Papers* 38 (1984), p.21.
2. Hunger, H., *Βυζαντινή Λογοτεχνία*, v. 3, *Η λόγια κοσμική γραμματεία των Βυζαντινών* (Athens 1994), p. 121.
3. Tassinari, P., *Ps. Alessandro d' Afrodisia: Trattato sulla febbre*. Culture antiche (Studi e testi 8, Alessandria 1994), has contested the attribution of this work to Alexander. He regards the text as philosophical rather than medical and date it to the 2nd C. AD.
4. Hunger, H., *Βυζαντινή Λογοτεχνία*, vol. 3, *Η λόγια κοσμική γραμματεία των Βυζαντινών* (Αθήνα 1994), pp. 121-2. Scarborough, J., «The life and times of Alexander of Tralles», *Expedition [University of Pennsylvania Museum of Archaeology and Anthropology]* 39 no.2 (1997), pp. 51-60.
5. Duffy, J., «Byzantine medicine in the sixth and seventh centuries: Aspects of teaching and practice», *Dumbarton Oaks Papers* 38 (1984), p.25; Hunger, H., *Βυζαντινή Λογοτεχνία*, τόμ. 3, *Η λόγια κοσμική γραμματεία των Βυζαντινών* (Αθήνα 1994), p. 123.
6. Duffy, J., «Byzantine medicine in the sixth and seventh centuries: Aspects of teaching and practice», *Dumbarton Oaks Papers* 38 (1984), p.26; Hunger, H., *Βυζαντινή Λογοτεχνία*, vol. 3, *Η λόγια κοσμική γραμματεία των Βυζαντινών* (Αθήνα 1994), σελ. 122; Scarborough, J., «Early Byzantine Pharmacology» *Dumbarton Oaks Papers* 38 (1984), pp.226-8.

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	<b>Martindale J.R.</b> , "Alexandros Tralleianos", <i>The Prosopography of the Later Roman Empire 3/1</i> , Cambridge 1992, 44-45
	<b>Brunet F.</b> , <i>Oeuvres médicales d'Alexandre de Tralles: le dernier auteur classique des grands médecins grecs de l'antiquité</i> , 1, Paris 1933
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	<b>Bloch I.</b> , "Byzantinische Medizin", M. Neuburger-J. Pagel, <i>Handbuch der Geschichte der Medizin 10</i> , Iena 1902, 535-544
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## Glossary :

[helminth](#)

A parasitic intestine worm living and feeding off its living host.

## Sources

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## Quotations

### Excerpt from Alexandros' work *De oculis*

‘Όταν κάποιος θέλει να δει μικρά αντικείμενα και κουράζεται, βλέποντάς τα με ακίνητα μάτια, παθαίνει οφθαλμία. το ίδιο παθαίνουν συχνότερα και οι λουόμενοι στη θάλασσα και όσοι εργάζονται μέσα σε καπνούς και μάλιστα αυτοί που είναι εκτεθειμένοι στον ήλιο και όσοι τρών αλμυρά φαγητά -η κόπωση που αισθάνεται κάποιος μετά το φαγητό και το ποτό προκαλεί οφθαλμία- και αυτοί που αγαπούν υπερβολικά τα λουτρά, αυτοί που επιδίδονται έντονα σε σεξουαλικές επαφές και αυτοί που κατοικούν σε πάρα πολύ θερμές περιοχές, και μάλιστα στην περιοχή των αιγυπτιακών Θηβών’.

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## Auxiliary Catalogs

### Oeuvre



Θεραπευτικά (*Therapeutica* ή *Libri duodecim de re medica*)

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Περί ελμίνθων (*De Lumbricis* ή *Epistula de Lumbricis*)

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Alexander von Tralles, *Περί ελμίνθων (De Lumbricis ή Epistula de Lumbricis)*, ed. T. Puschmann, vol. II (Vienna 1878).

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