

Aelius Galenus

Aelius Galenus (129 – 200/219 AD), meaning calm or serene, was the most important medical personality in Ancient Rome, the second greatest physician of Antiquity, after Hippocrates.

He started his medical career as anatomist and surgeon of gladiators.

He described wounds as “windows of the body”.

He wrote a “complete anatomy of the human body”, a work comprising the anatomical writings of Herophil, as well as his own observations gathered while dissecting various animals, and extrapolating their anatomical features in humans.

He supported the Miasma Theory as a source of infections.

He has the merit of writing a remarkable synthesis of medical philosophic theories, combining Hippocratic Humors Theory with the Solidist Theory of Methodic School as disease triggering phenomena.

He was the last great physician of Antiquity preoccupied by blood circulation, that experimentally studied the functions of the heart.

He underlined the connection between anatomo-physiology and clinical medicine, claiming that a good diagnostic and therapeutic activity cannot be conceived without knowing the structure of organs.

Following the Hippocratic pathology concepts, Galenus:

established the difference between pneumopathies and pleural affections

defined jaundice as a symptom, not a disease

described disease of nutrition (diabetes mellitus), of nervous system (psychosis, paralysis, epilepsy)

he showed little interest for surgical and gynecological affections

Galenus was also interested in patients who simulated diseases, writing a paper on this subject.

Concerning therapy, Galenus adopted the Hippocratic concepts in which the physician helps nature in curing patients.

The treatment was established according to individual factors and patients’ constitutional type.

He differentiated between prophylactic measures and curative measures for sick patients.

Following Hippocratic ideas, he considered necessary to use a symptomatic remedy, rather than a treatment aiming for the cause of disease.

For the first time in history, Galenus proposed and applied various physical procedures (recovery gymnastics, ergotherapy).

Theoretical pharmacology comprised a variety of synthesized substances from plants:

opiacee (painkillers, anaesthetics); tea; placebo medication – Galenus understood the role played by autosuggestion in the treatment of some patients

The use of emetic substances, phlebotomy, purgatives in order to remove harmful substances from the body and to restore the balance of humours.

Galenus adopted the theory *contraria contrariis curandum est* – treatment through medications with an action opposite to symptoms.

Galen represents one of the most important personalities in ancient medicine.

The synthesis of his theories and knowledge influenced the medical act for almost 1500 years.

Oribasius (325 - 403)

He wrote three major works: *Synagoge medicale*; *Synopsis*; *Euporista*

Synagoge medicale – is a medical

encyclopaedia in 70 volumes that contains a compilation of works belonging to various authors from Antiquity, and synthesizes the medical concepts from Hippocrates to Galen.

Synopsis – handbook in 3 volumes, 9 chapters: *critic* – presents old medical books, ordered and completed with his own clinical experience; *synthetic* – is a systematic and summarizing work for medical knowledge of his era; *didactic* – the first manual for students (written for his son Eustatius) – used until the XVIIth century

Euporista – the first medical book for common people, equivalent to public education for health (until then, the medical art was exclusively reserved for priests - physicians)

Antilos (sec. IV)

he wrote about surgery, pharmacology, balneology;

he described arterial aneurisms, along with causes and surgical techniques for their treatment (this technique was used until the XIXth century).

Aetius from Amida (502 - 575)

he wrote *Tetrabiblon* (4 volumes), Hippocratic-Galenic compilation, with various elements of Christian mysticism;

he described diphtheria, as well as a new tracheotomy technique;

he identified three types of intestinal worms and their associated treatment;

he proposed prayers as remedies for healing patients.

Alexander of Tralles (525 - 605)

considered one of the greatest physicians from Galen era until Renaissance;

follower of Hippocratic and Galenic concepts, he was a strong believer in the 4 humours theory;

his main work was "Twelve books of medicine"

they bring a series of novelties in medicine, by clearly describing clinical observations;

he introduced inspection, palpation and percussion within patients' clinical examination.

Paul of Egina (VIIth century)

The last of the great Byzantine physicians he studied and practiced medicine in Alexandria, where he remained even after the Arab conquest.

he was a very talented surgeon

he wrote numerous medical works

only the Medical Encyclopaedia (7 volumes) survived

he described new surgical procedures for tracheotomy, haemorrhoids, anal fistulas, hernia

he introduced the name of cancer for mammary neoplasm, for which he recommends mastectomy.

Abulcasis (Abu al-Qasim al-Zahrawi) (936 - 1013)

father of modern surgery

He practiced in Cordoba hospital

He wrote a 30 volumes encyclopaedia containing medical and surgical information

The first illustrated surgery book (with more than 200 drawings representing surgical instruments and operated organs)

He contributed to the progress of surgery:

The first description of extrauterine pregnancy

He developed and used the forceps

He invented numerous surgical instruments

He used, for the first time in history, catgut in surgical sutures

He developed new surgical techniques (in thyroid surgery, breast cancer)

Marcello Malpighi

In his paper published in 1661, he describes the capillaries and red and white cells that are present in the blood.

He founded microscopic anatomy— descriptive and compared histology, by publishing his results obtained during his research with the help of the microscope through which he tried to explain the development of plants and animals.

He also described the structure of skin, liver tissue, kidney, pulmonary alveoli, spleen.

Franciscus Sylvius (1614 - 1672)

an anatomy professor preoccupied especially in studying brain's anatomy

He introduced clinical lessons in which students examined sick persons

He studied the chemical composition of: saliva, pancreatic juice, bile

He recommended post-mortem examination and autopsy in order to confirm the diagnosis – thus he identified lesions specific to ganglionar tuberculosis

He used alkali and acid medication in order to re-establish the normal balance of the organism.

Regnier de Graaf (1641-1673)

anatomy professor

His research was mainly focused in studying the female anatomy

He described ovulation, uterine tromp functions, the uterus and the ovarian follicles

He supported Harvey's theory regarding the evolution of life from egg cells.