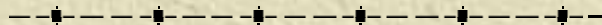
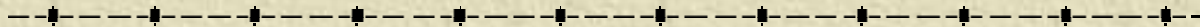
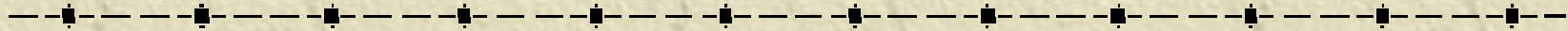
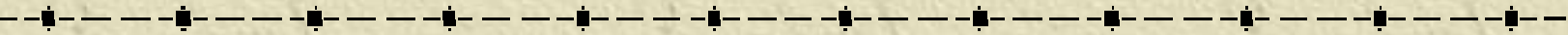


Healing in the ancient Mediterranean






- ✦ **The ancient world** is a group of countries which have developed in the first millennium BC on the Mediterranean coast
- ✦ The most important among them:
 - ✦ - Ancient Greece
 - ✦ - Ancient Rome



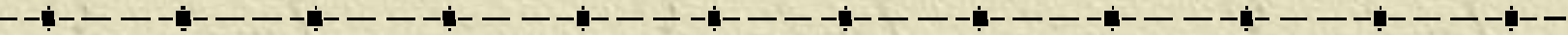
- ✦ **In contrast to the countries of the Ancient East, Ancient Greece and Ancient Rome appeared more developed and complex forms of state administration.**
- ✦ **The people of Ancient Greece created a high culture and eternal human values.**

Preconditions the development of culture in ancient Greece

- 
-
- ✦ 1. Geographical location (Reseller between the countries of Asia, Africa, Southern and Western Europe)
 - ✦ 2. The acute social contradictions within the country
 - ✦ 3. The Greece victory over Persian invaders

General characteristics of the ancient Greece culture


- ✦ Greek philosophers laid the foundation of many scientific disciplines and gave them names
- ✦ Greek and Latin writing system formed the basis modern writing The Latin language has long been the international language of science
- ✦ There are thousands Greek and Latin words in Russian language.



- ✦ **The ancient Greeks created a unique epic of gods, heroes, heroes**
- ✦ **The theater appeared for the first time in Greece, created undying monuments, sport competitions and the Olympic Games**

One of the manifestations of ancient Greece culture – it is the development of philosophical thought

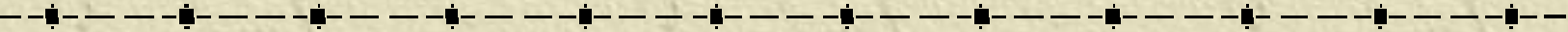
-
- ✦ Formed two philosophical currents: materialism and idealism The top of of the ancient materialism is atomistic direction. Representatives of atomistic direction are Leucippus (500-440 BC.) and Democritus (460-330 BC.)



**Democritus is the
ancient Greek
philosopher of
Abdera
(bronze bust)**



Basic Provisions the teachings of Democritus



- ✦ At the core of the world is the matter, which consists of tiny particles (atoms)
- ✦ Nature is in perpetual (constant) moving and changing

The idealistic direction of philosophy

- ✦ Presented by the School of Pythagoras and Plato's school.
- ✦ Scientists deny the study of nature, explaining what is happening all over the world facing the influence of supernatural power.

The medical system of Plato

-
- ✦ The cause of disease is not an external factor, and that the physical side of an organism is not "subordinated" the spiritual, divine.
 - ✦ Therefore, therapy should be not so much medication, but in the performance of various rites.

Sources of information about the medicine in ancient Greece

- ✦ Works of Homer's "Iliad", "Odyssey"
- ✦ Herodotus, "History in 9 books"
- ✦ Hippocratic Collection (composed around the III. BC)
- ✦ Archaeological excavations

In compared with other countries Medicine of Ancient Greece had the highest level

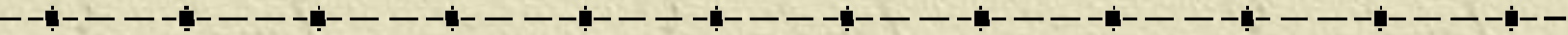
- ✦ This was facilitated by leading philosophical doctrines of the ancient Greeks:**
- ✦ - Formed materialistic views on the causes of disease**
- ✦ - Considered the connection of disease with the environment**
- ✦ - The disease was regarded as a changing phenomenon, taking place in a certain stage of development.**

Hellenistic period (second half of the IV century BC - the middle of the I century AD)

- ✦ Religion has been further developed
- ✦ It contributed to the development of priestly medicine
- ✦ For the treatment of patients using the room at the temples (asklepeyony)

**Asklepeyon - room in the temples, for the treatment
of patients**





- ✦ **Asklepeyony placed in medical areas, near sources of mineral water.**
- ✦ **The name "asklepeyon" comes from the name of the god of healing Asclepius.**
- ✦ **Asclepius (Aesculapius in Latin) according to legend lived in northern Greece doctor.**

**Antique sculpture
depicting the Asclepius
with his staff and a scroll**

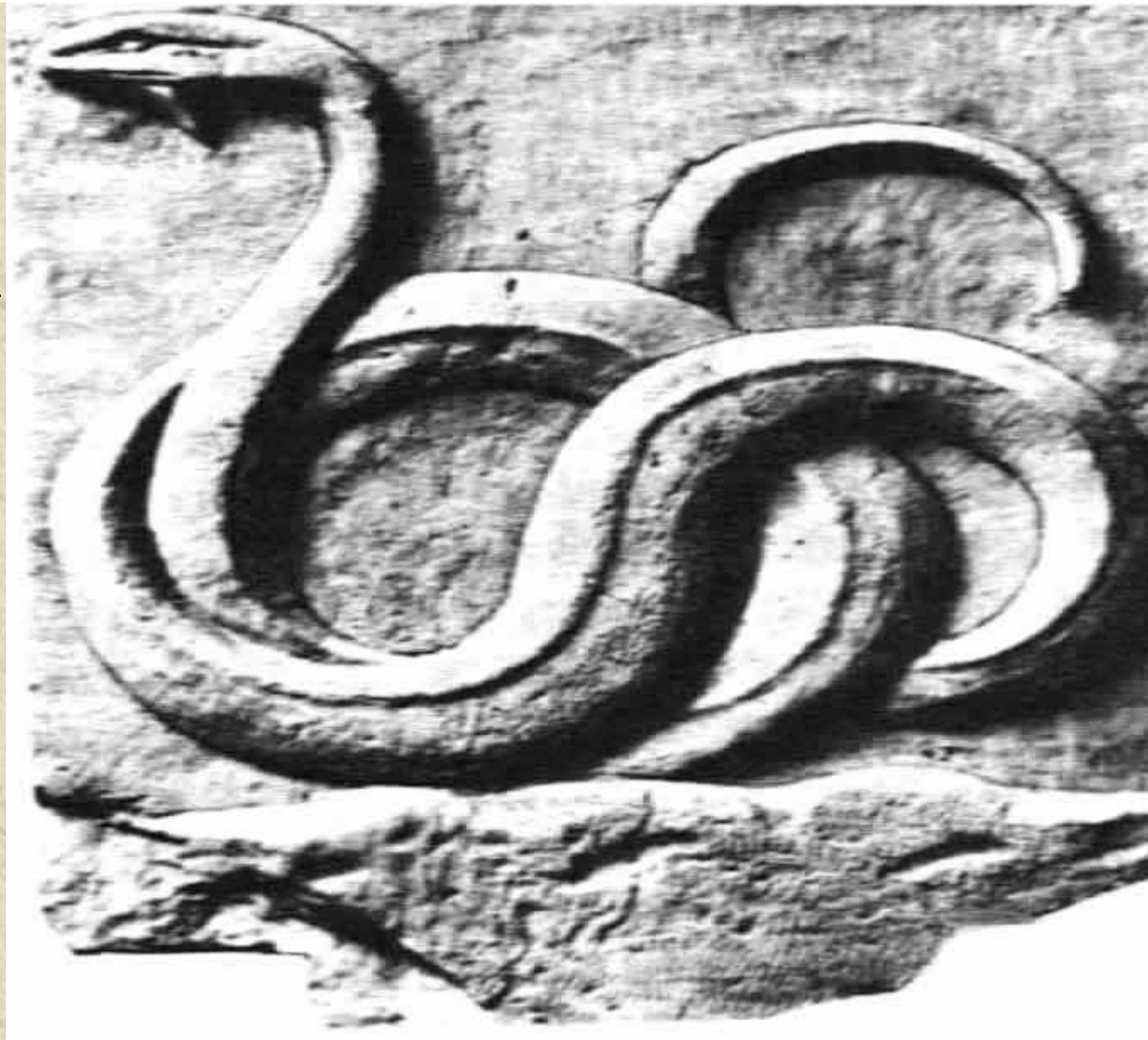


Healing in asklepeyonah combined the empirical and magical acts

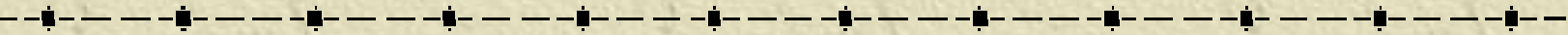
-
- ✦ The basic means of treatment were:
 - ✦ natural medicines,
 - ✦ hydrotherapy,
 - ✦ diet, mode,
 - ✦ gymnastic exercises,
 - ✦ theatrical performances.

Attributes of Asclepius

- ✦ Ancient authors believed that the staff of Asclepius is the symbol of care and support patients and thickening on his staff show the complexity and wisdom of healing
- ✦ Snake in ancient times symbolized the wisdom of science and cognition



The holy Serpent. Bas relief in Athens



- ✦ **Daughters of Aesculapius considered the goddess patroness of certain areas of medicine.**
- ✦ **Hygieia - the goddess of health. From her name comes the word hygiene.**
- ✦ **Panakeya - the patroness of drug treatment, the goddess of healing.**

**Hygieia - the goddess
of health**

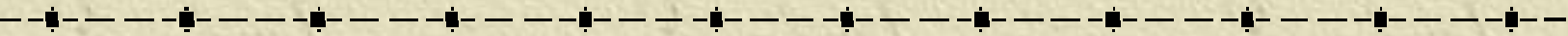


Asclepius and Hygieia



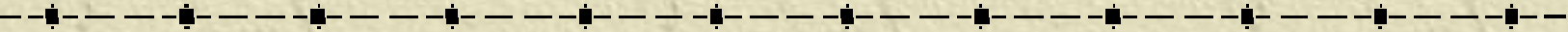


Panakeya - the goddess of healing



- ✧ Along with asklepeyonami in ancient Greece there were nursing homes – “yatreyi”
- ✧ In big cities of the ancient Greek physicians were divided into public, home, traveling, secular.

Doctors of Ancient Greece



- ✦ **Public** - treated the poor free citizens and carried out measures against epidemics
- ✦ **Home** - treated rich people
- ✦ **Errant (perioevty)** catered to merchants and handicraftsmen
- ✦ **Secular** - treated the wounded during the wars

Medical school of ancient Greece

- ✦ Croton (g.Kroton, Southern Italy) - Alcmaeon
- ✦ Cnidus - Evrifon
- ✦ Cos (o.Kos, Asia Minor) - Hippocrates - the great ancient Greek physician, reformer of ancient medicine

The famous healer Croton school (Pythagorean philosopher) Alcmaeon

- ✦ For the first time in the history of medicine presented organism as a unity of opposites
- ✦ He introduced the principle in medicine "the opposite there is a drug from the opposite"
Alcmaeon dissected the corpses and made several discoveries in the morphology

Cnidus medical school

- ✦ Developed the theory of the four bodily juices (blood, phlegm, clear bile, black bile)
- ✦ Health is understood as a result of a favorable mix and, conversely, negative was seen as the cause of most diseases
- ✦ The doctrine of juices body was formed humoral theory. This theory was in medicine until the XIX century.

Cnidus medical school

-
- ✦ Doctors have learned to describe the symptoms and their meanings in diagnosis of disease
 - ✦ Outstanding healer of this school was Evrifon of Cnidus - a contemporary of Hippocrates.
 - ✦ Evrifon introduced the concept of "crasia" and "dyscrasia", which defines health and illness

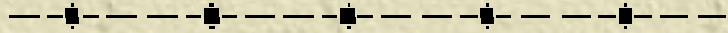
Cos medical school - the main medical school of ancient Greece

-
- ✦ **Cos physicians believed that a person's health and disease are composed in close connection with the outside world**
 - ✦ **In their understanding, the disease is not a punishment of the gods. This is influence of surrounding nature and eating disorders**

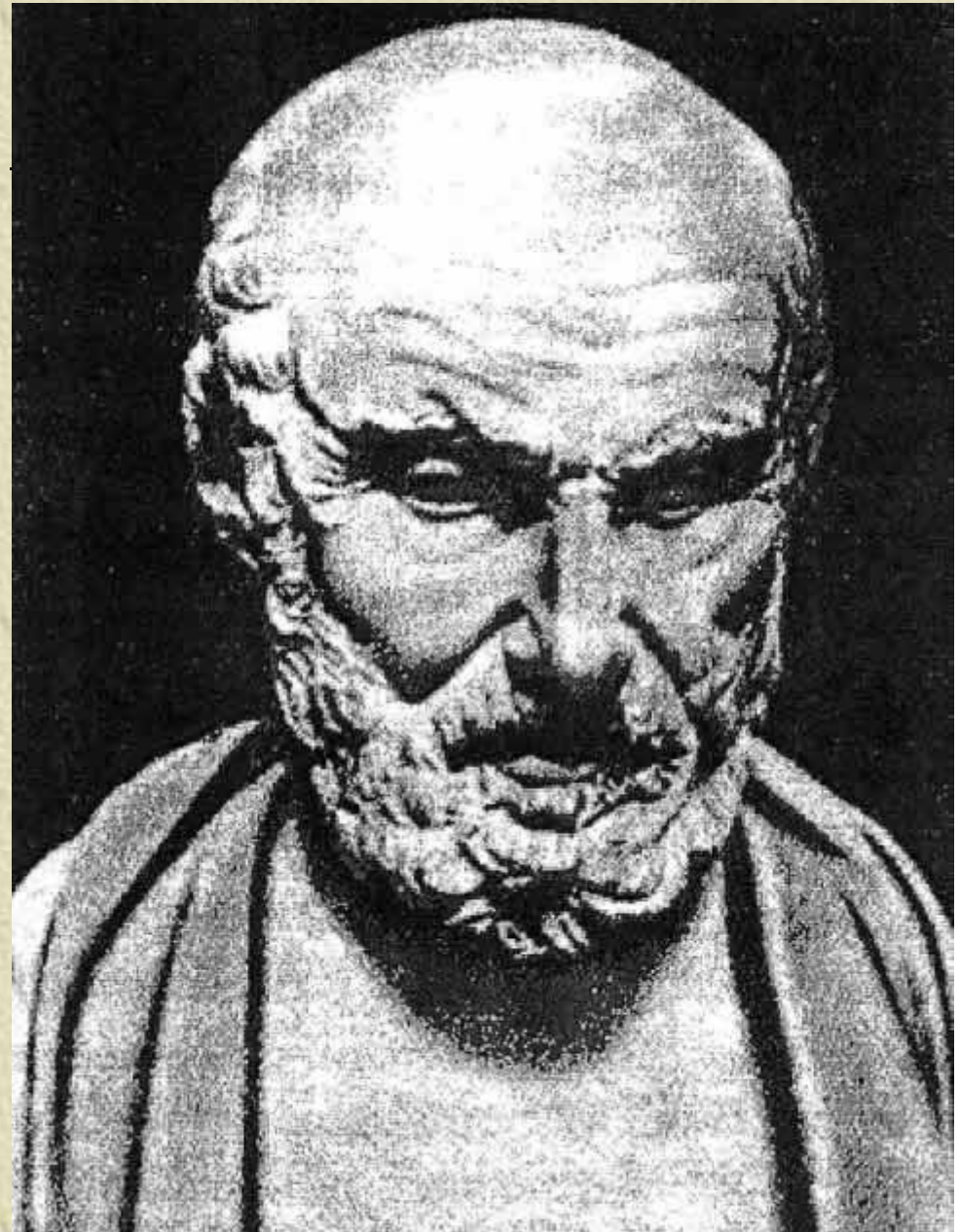
Healers Cos school

- ✦ Developed the doctrine of body juices, and four types of people who live in different localities
- ✦ Developed the principles of care and treatment at the bedside
- ✦ Examined sick people, did forecast of disease
- ✦ Representative school is Hippocrates of Cos - reformer of ancient medicine.

Hippocrates



460 - 377
years BC.





✦ **Kos Island - the birthplace of Hippocrates**



Sycamore of Hippocrates in Kos

"Hippocratic Corpus"

-
- ✦ Encyclopedic collection of medical content
 - ✦ Composed around the IV century BC Contains
 - ✦ 72 books of ancient Greek physicians

The title page of
Hippocratic Corpus

HIPPOCRATIS
COI, MEDICORVM OMNIVM
longè principis, opera quæ ad nos extât
omnia: per Ianũ Cornarium Medicum
Physicum latina lingua conscripta, &
denuò ex toto recognita.

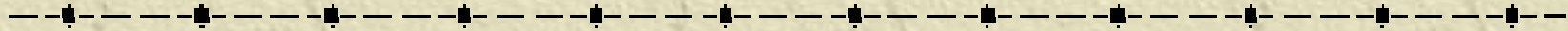
Addito Indice sæcundissimo.



BASILEAE, ANNO
M. D. LIII.

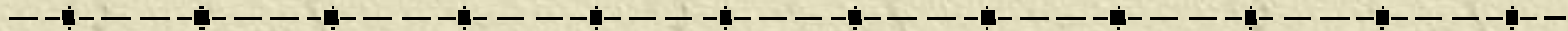
Cum gratia & privilegio Imp Ma
iestatis ad annos quinq.

The works of Hippocrates:



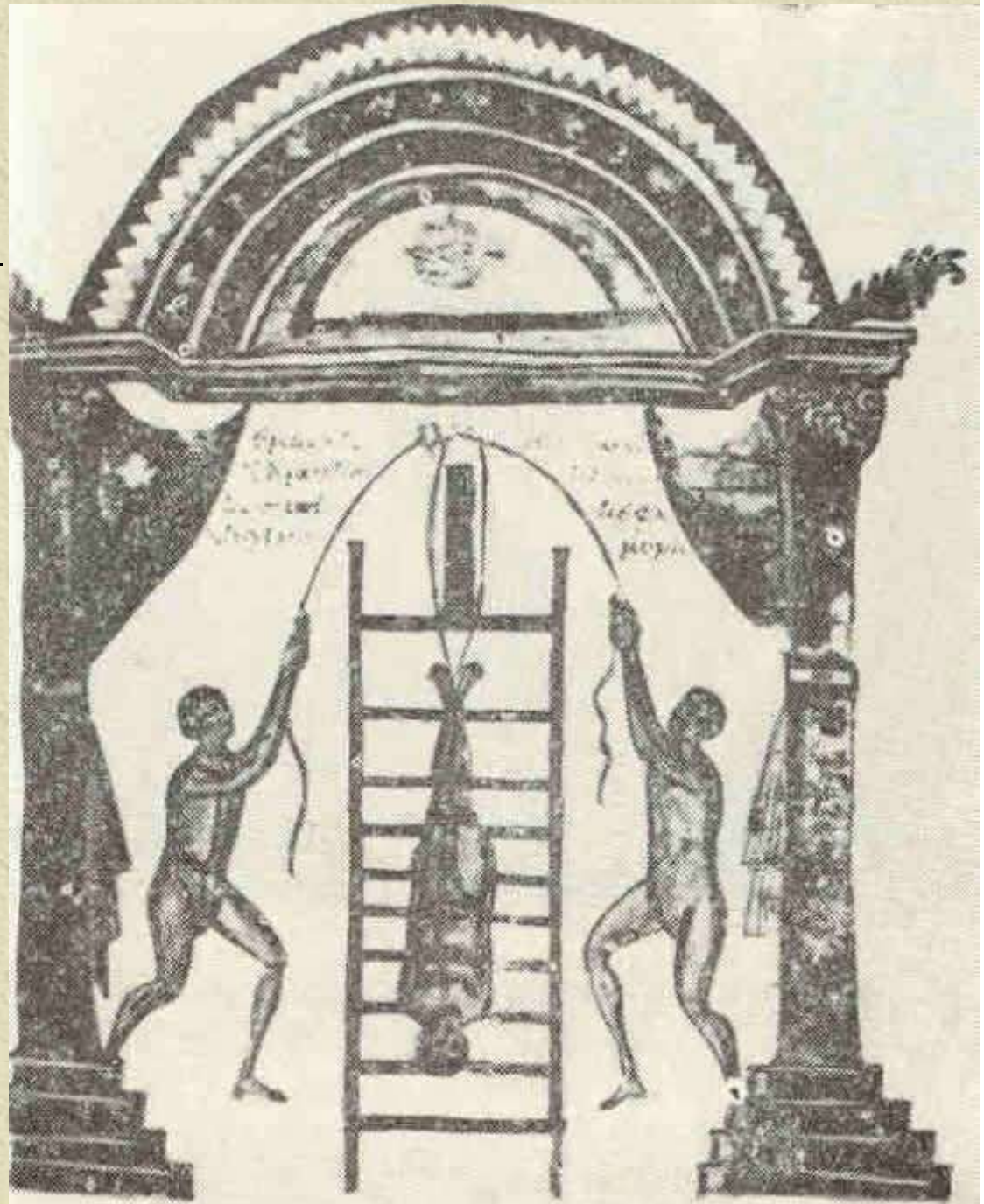
- ✦ Aphorisms
- ✦ Epidemics
- ✦ About the air, waters and places
- ✦ About head wounds
- ✦ About fractures
- ✦ Prognostics

The basic principles of the Hippocratic therapy



- ✦ 1) Patient autonomy,
 - ✦ 2) Beneficence,
 - ✦ 3) Non maleficence
- ✦ “Non maleficence” means to do no harm. “Beneficence” means to help others when one is able to do so. Both of these principles are derived from the Hippocratic Oath, “As to diseases, make a habit of two things – to help or at least to do no harm”

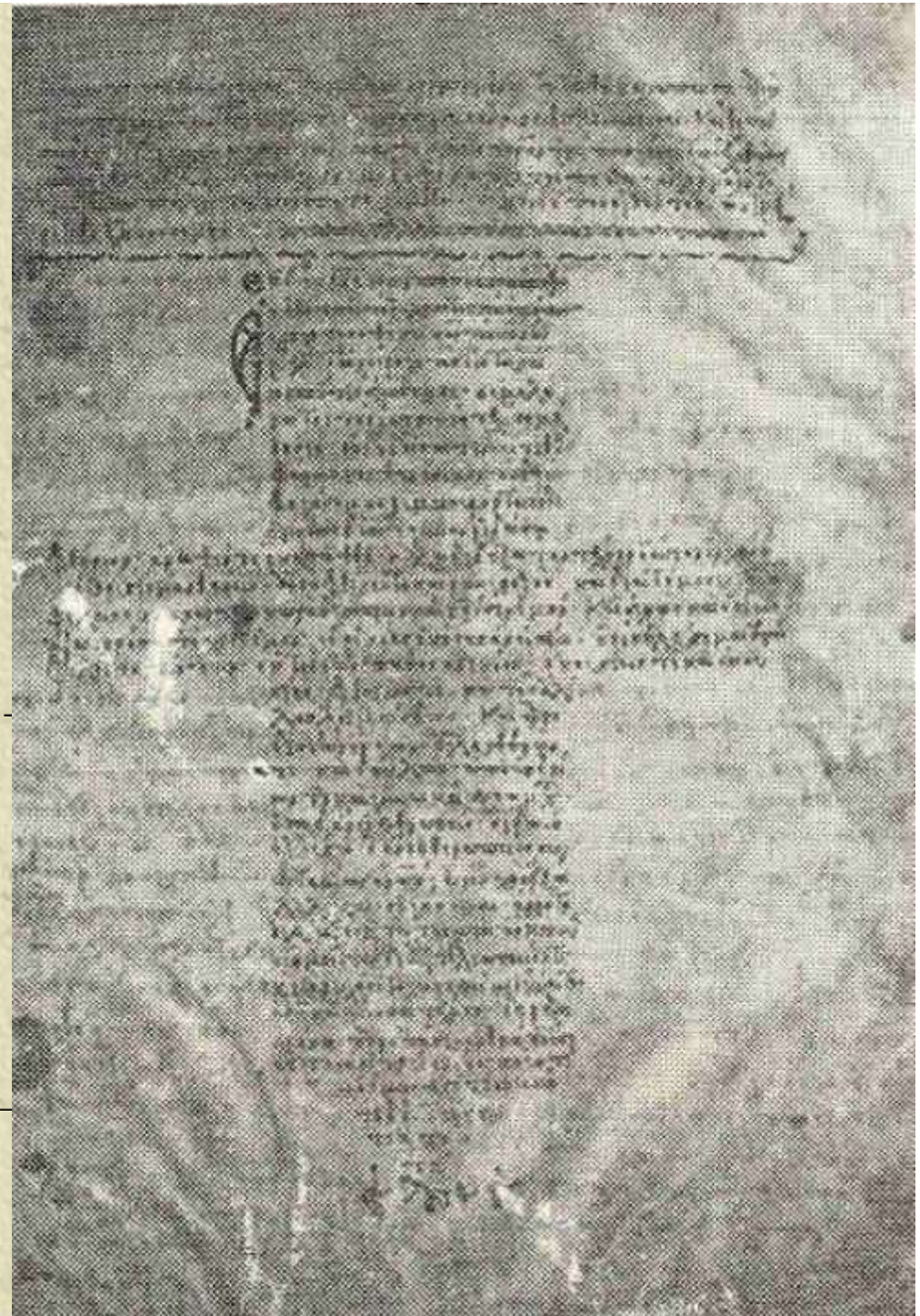
Reposition of dislocation



**Hippocrates merit in
the development of
the moral
foundations of
healing**

The Hippocratic Oath

**Byzantine manuscript XII
century. Vatican Library.
Rome**



Hellenistic period

-
- ✦ Zenith of Greek medicine reached in the Hellenistic period (the second half of IV century BC - the middle of the I century AD).
 - ✦ This period is connected with the name of the ancient Greek philosopher - Aristotle

Aristotle
384 - 322 years. BC.



Basic provisions of the Aristotle philosophical works:

-
- ✦ The proof of the primacy of matter. He was the first who applied this thesis.
 - ✦ Aristotle acknowledged the existence of the soul. The soul, according to Aristotle, is generated by the motion of matter, although it is nonmaterial concept.
 - ✦ Such statements are shaped by the teachings of Plato.

Aristotle

-
- ✦ Developed logic problems
 - ✦ The mind has a special meaning and was the main advantage of a person in contrast to another world



Gerofil - founder of descriptive anatomy. The first Greek who conducted the autopsy.

Gerofil

-
- ✦ Investigated of brain ventricles.
 - ✦ He described three stages of heart contraction: systole, pause, diastole.
 - ✦ He showed the difference between arteries and veins.
 - ✦ He measured the small intestine, called the duodenum.
 - ✦ He published the work "Anatomy"

The peculiarity of the Hellenistic period

- ✦ **Development of anatomy**
- ✦ **Advances in surgery (the introduction of vascular bandaging, the invention of catheter, complex operations on the kidneys, liver, spleen, amputation, etc.).**
- ✦ **Two powerful source had surgery of the Hellenistic period: the Greek - surgery with bloodless methods of treatment (dislocations and fractures) and Indian surgery which were complex operations.**

Medicine of Ancient Rome

-
- ✦ It is the successor of the Greek and eastern medicine.
 - ✦ Ancient Rome medicine has been closely associated with the medicine of ancient Greece, however, had the own characteristics.

Sources about the medicine of ancient Rome

-
- Lucretius poem "The nature of things"
 - Aulus Cornelius Celsus "Treatise about medicine"
 - Claudius Galen "On the appointment of parts of the human body"
 - Information from archeology, ethnography, material and numismatic sources

Poem

“The nature of things“

Titus Lucretius Carus

T. LVCRETII
CARI DE RERVM
NATVRA LI-
BRI SEX,

Mendis innumerabilibus liberati; & in pristi-
num parè veterum potissimè librorum
ope ac fide, Ab O BERTO G I F A N I O B V
R A N O Iuris studio, restituti.

*Quæ præterea ab eodem in hoc opere sunt præstita,
inversa pagina indicabit.*



ANTVERPIÆ,
Ex officina Christophori Plantini.

clō. lō. lxxvi.
PRIVILEGIO.

In the poem “The nature of things“ are thoughts:

-
- ✦ About the structure of living organisms made up of atoms
 - ✦ About species differences
 - ✦ About the hereditary transmission of signs
 - ✦ About causes of infectious diseases

- “Treatise about medicine”
- Aulus Cornelius Celsus
1566

AVRELII
COR CELSI
DE RE MEDI-
CA LIBRI
OCTO.
*
Q. SERENI medicinale Poëma.
RHEMNI Poëma de Pond. & mensuris.
Cum Adnotationibus & Correctionibus
R. CONSTANTINI.
IN VIRTUTE ET FORTUNA.
LVGDVNI,
APVD GVLIEL. ROVILLIVM.
SVB SCVTO VENETO.
M. D. LXVI.
CVM PRIVILEGIO.

“Treatise about medicine

-
- ✦ Encyclopedia has 8 volumes about methods of healing**
 - ✦ Informations about predecessors and contemporaries of Celsus Contains description of known diseases, their symptoms, methods of treatment**

Aulus Cornelius Celsus

-
- ✦ **Developed idealistic trend in medicine**
 - ✦ **Believed that doctor's experience has most useful assistance in the clinical practice**
 - ✦ **Medicine Ancient Rome has been closely associated with the medicine of ancient Greece, but had own characteristics**

Medicine of ancient Rome - Features of development

-
- ✦ **Create the Military Medical Service**
 - ✦ **Established military hospitals (valetudinarii)**
 - ✦ **In the cities there were sanitation facilities: Water supply, sewerage, bath-terms. Roman Baths were hygienic, medical, social and cultural centers**
 - ✦ **Created the Laws of sanitary rules**
 - ✦ **Were introduced arhiyatrov positions (chief physicians)**

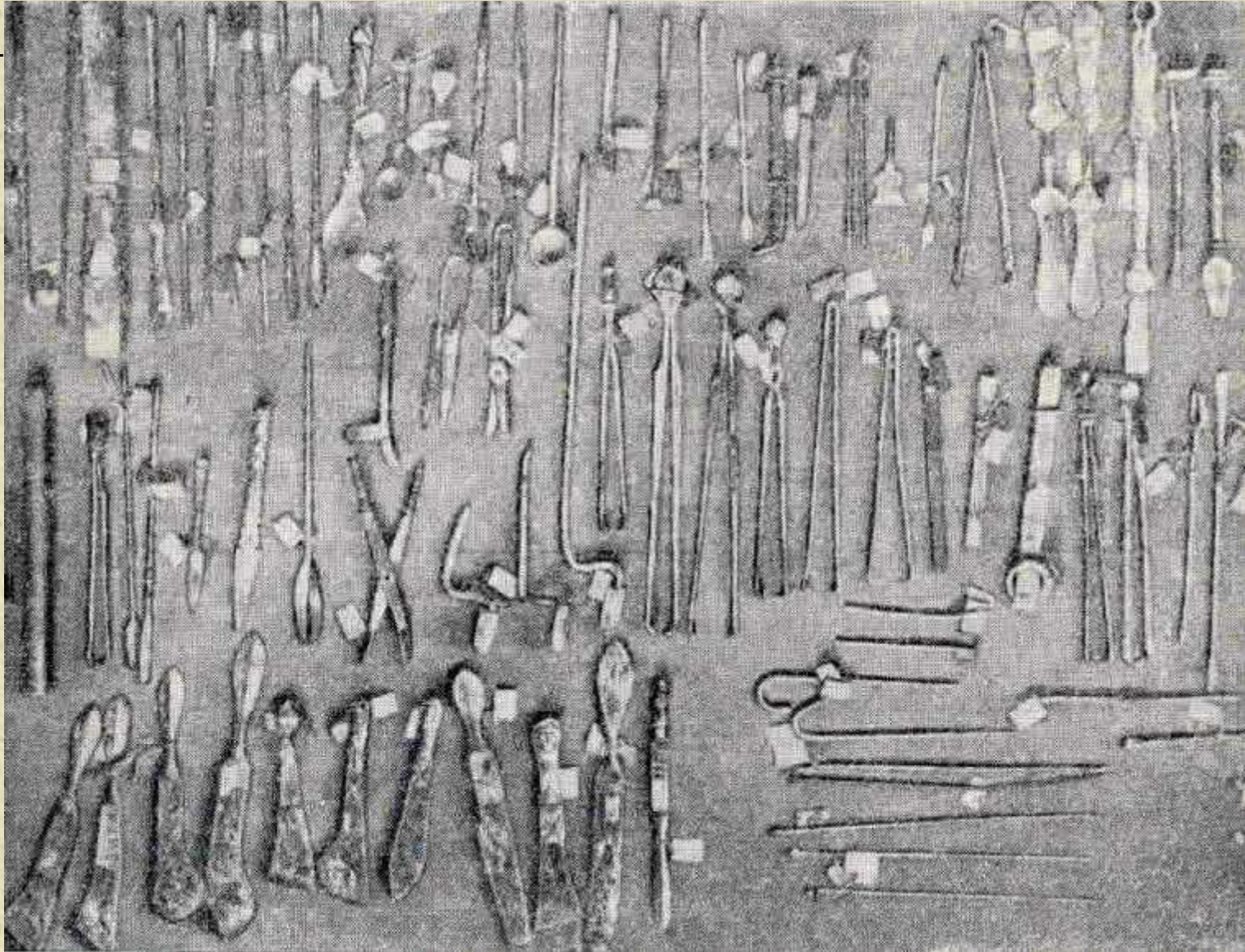
The Roman physician



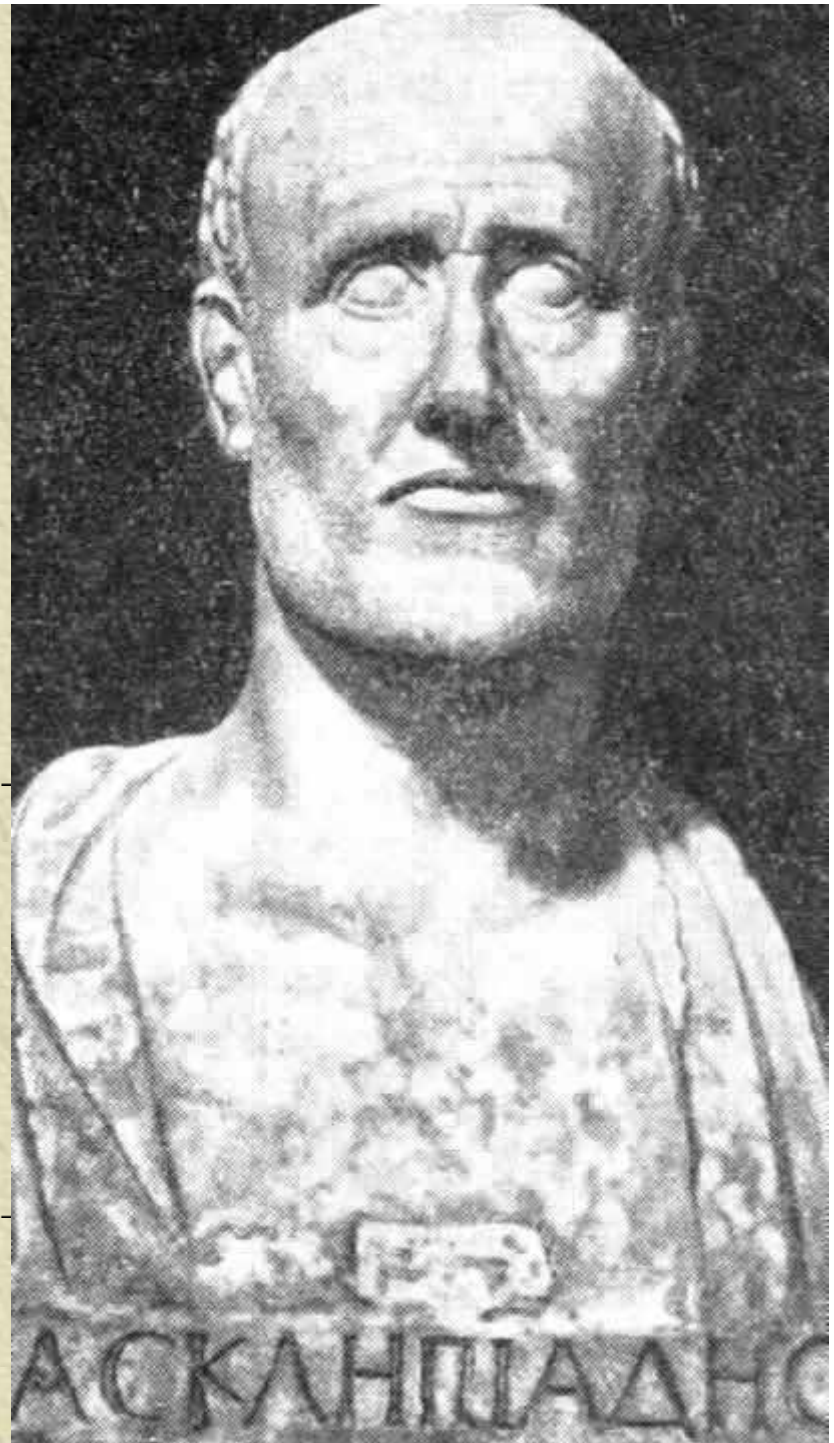
Antique bas



Roman surgical instruments. Naples. National Museum



**Asklepiad - one of the most prominent Roman physicians
128-56 BC.**

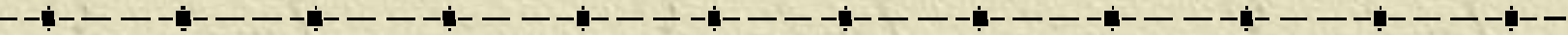


Asklepiad

-
- ✦ **Developed materialistic trend of ancient Rome medicine**
 - ✦ **He believed that the body's material basis are atoms**
 - ✦ **He believed that the disease depends on the stagnation of solid particles in the pores and channels of the body.**

Asklepiad

-
- ✦ **The etiology of the disease is strategy of therapy**
 - ✦ **"The physician must treat safely, quickly and pleasantly"**
 - ✦ **The primary importance in the treatment are diet, massage, baths and other means of physiotherapy**



- ✦ **A special place in the history of culture world and medicine history takes a Roman physician - Claudius Galen.**
- ✦ **The main merit of Galena is to apply the experiment to study the physiological processes in vivo. It was first time in the history of medicine.**

Claudius Galen
Approximately
130 - 200 BC

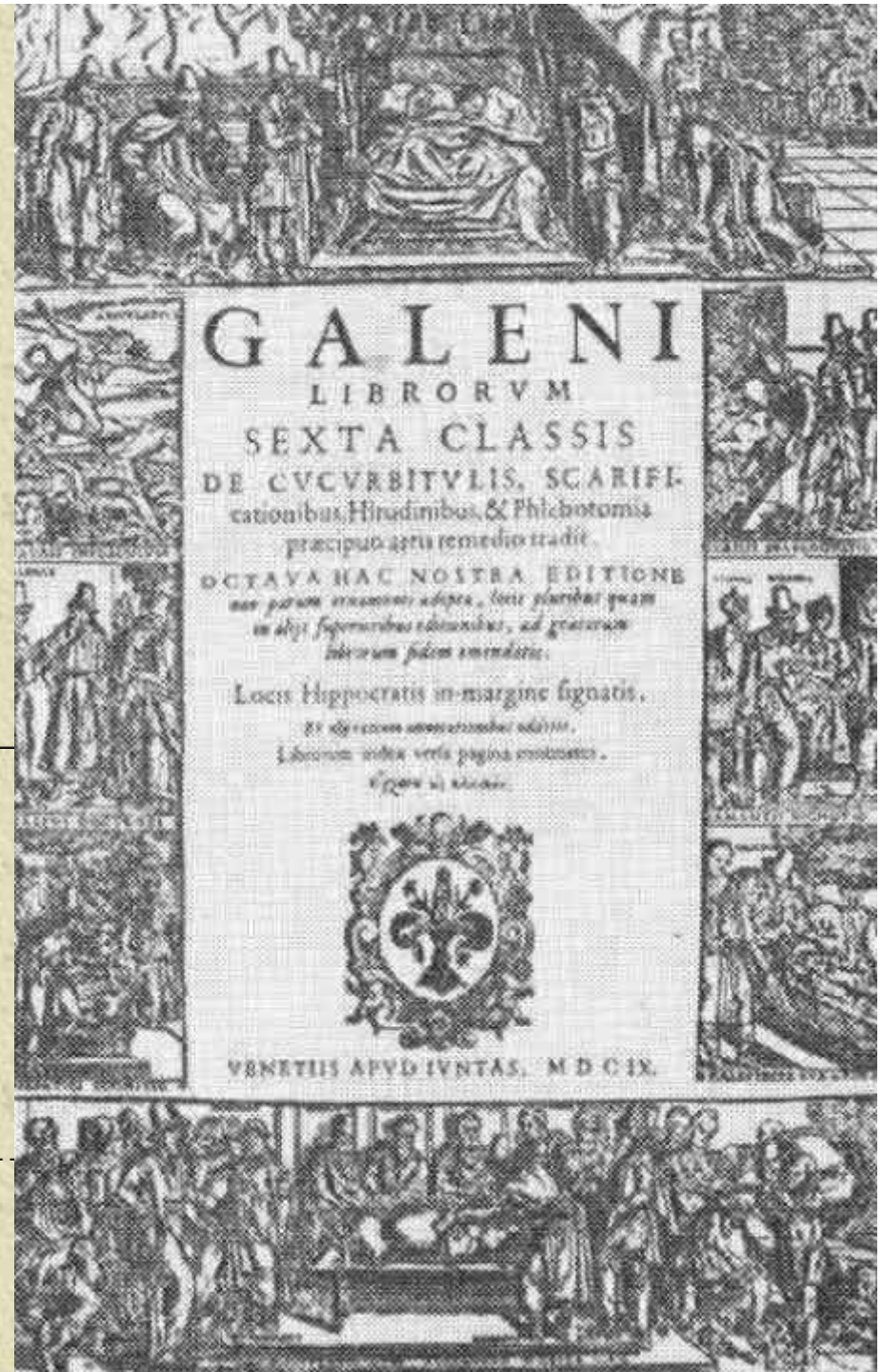


Galen's contribution to the development of medicine

-
- ✦ Apply the experiment on animals to study the physiology of respiration system
 - ✦ Marked the beginning of the topical diagnosis of the nervous system diseases
 - ✦ He has made a regimentation for preparation of medicines from plants
 - ✦ He summed up the experience of many generations of physicians in own works

The labor of Galen

"On the appointment of the human body parts"



Galen

-
- ✦ He thought that the habitat can be a cause of disease, but it can also heal.
 - ✦ He believed that health is the balance and harmony of the 4 "moisture", which controlled by all things in the body.
 - ✦ He was a supporter of the humoral theory of disease.

Galen

-
- ✦ He systematized doctrine about disease causes
 - ✦ He indicated that the disease develops from the effects of causal factors on the patient's body
 - ✦ Has shown that anatomy and physiology - the scientific basis for the diagnosis, treatment and prevention

Galen

-
- ✦ Galena's world is dualistic: in their philosophical views he followed Aristotle, but for expediency was the standpoint of Plato's "eternal mind"
 - ✦ Catholic Church and scholastics in the Middle Ages used the idealistic side of Galen's teachings and tied them with theology.
 - ✦ So, galenizm is distorted, one-sided understanding of the teachings of Galen.

476 year

-
- ✦ The Roman Empire ceased to exist
 - ✦ The ancient slave system ceased to exist
 - ✦ Has entered a new period of history - the Middle Ages