

# ORIGIN AND SLOW PROGRESS OF STUDY OF ANATOMY IN ANCIENT TIMES

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*Primitive man and his ideas about anatomy :* Primitive man's understanding of the human body is unintelligible. The attribution of "some thing" to the living, than to the dead and questioning of the functions of this unknown something, is the fundamental basis of primitive concept of spirit. These primitive theories of the phenomena of life and living, left very little room to probe deeply into the mysteries of human structure and function. Primitive man was not, however, completely without some factual knowledge. Some knowledge, of this type was, in fact, actually embodied in magic and when Cro-Magnon man drew his cryptic pictures upon walls of caves during the upper paleolithic epoch, probably for magical purposes, he exhibited a certain practical knowledge of topographic anatomy. Still, before the Greeks, only the vaguest references reveal any evidence of anatomical information. The code of Hammurabi which is believed to be based upon still older source and is a legal document, makes it clear that a definite medical class existed in the valleys of the Tigris and Euphrates, at a much earlier period than the date of any medical texts.

*Egyptian and Babylonian contributions :* The earliest evidences of a developed medical system in Egypt are indirect. Even though the Egyptians practised embalming, they learned little anatomy. There was also no apparent need for anatomy in a philosophy which stated the suffering and consequently, disease were due to the annoyance of a deity. The Babylonians attributed a supernatural power to the liver and this belief led to the study of its anatomy. The priests of the day were provided with the clay models of the liver of the sheep. The gall bladder, cystic, and hepatic ducts, and the ductus choledochus, were all specifically mentioned. Models of organs also began to appear, as votive offerings to the deities. The Babylonians made no distinction between the arteries and the veins.

*Greek contributions :* The Greeks had their share of contribution to the subject of Anatomy. The philosophers saw and speculated on brain and heart. There is, in the Hippocratic collection, a reference on the articulations, numbering 4<sup>5</sup>, which informs us that he wrote a work specifically devoted to the study of anatomy. Hippocrates's real contributions lie, not in the field of anatomy but in the method which he formulated for use in clinical medicine. It was Aristotle who later on added much to the subject of anatomy. Most of his ideas on anatomy may be found in his treatises "History of animals and parts of animal." but his physiological concepts are spread over much greater territory. The great distinction between earlier philosophers and Aristotle, therefore, is that while the former dealt chiefly with theoretical consideration, Aristotle was a practical man in search of facts as well as methods to ascertain them

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He added much to the original thinking about the lungs, viscera, arteries etc. In the words of Erik Nordenskiöld, he formulated a sort of theory of evolution, which is complete in itself. Unfortunately, Aristotle's treatises on human anatomy have been lost.

*Greek Medicine in Alexandria* : It was in Alexandria, that the botanical and Zoological gardens became famous. There is positive evidence that the systematic dissection of the human body belongs to the Alexandrian period. Later on Alexandria became a cosmopolitan city where views of various sects and schools exchanged. Two men, who were convinced about the importance of anatomy and physiology were Hiropophilus (355–280 B. C.) and Erasistratus (310–250 B. C.). Hiropophilus's contribution to anatomy earned him the name as the "Father of Anatomy". He worked more elaborately on the nervous system. Erasistratus had his interest in the functional aspects of the body. He is more known as the "Father of physiology" than for his contributions to Anatomy.

*Contributions of Romans and Arabians* :- Morinus came into prominence as anatomist in Rome. Considerable attention was paid to Myology by him. Aretus's description of the kidneys has led many anatomists to suspect that he was aware of the existence of the ducts of Bellini. Galen's contribution to subject of anatomy was considerable. His interest was specially on osteology. He described the muscles of the body accurately. His interest took him to the graves to study the bones. He was also interested in the nervous system. He made public demonstrations by dissecting pigs and monkeys and won over the public. Byzantine writers were only compilers. Arabians contributed very little to the subject, as they did not perform dissections and simply copied Greek and Roman writings on Anatomy.

## SUMMARY

The article briefly discusses the origin and progress of Anatomy from the primitive man and his ideas to the contributions of Egyptian, Babylonian, Greek, Roman and Arabian sciences.

सारांश

प्राचीन काल में शरीररचना का अध्ययन तथा धीरे धीरे विकास

ले० सी. के. मूर्ति

प्रस्तुत निबन्धमें संक्षेपसे यह बताया गया है कि शरीररचना के विकास की शुरुआत कैसे हुई और अविकसित मानव के विचारों से लेकर मिस्र, बाबिलोनियन, ग्रीक, रोमन और अरब देशीय विज्ञान का उसमें क्या-क्या योगदान हुए ।