MEDICAL PHILATELY

Ibn-al-Nafis (1210-1288 AD) Originator of Pulmonary Circulation

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After the coming of Prophet Muhammad, the Arabian tribes, in a great burst of expansionist energy, swept over Western Asia and North Africa. They disrupted, but did not destroy the Eastern Roman Empire, which had survived the barbarian onslaughts that had wiped out the empire in the West. The Eastern Empire, particularly after the Arabian conquests, came to be known as Byzantine Empire, after its capital, Byzantium.

Occupying Syria and Egypt in C 640 A.D, Arabs fell heir to much of the Greek science and this proved of importance and even beneficial to the history of science. It was essentially the Arabs who were in a position to preserve and transmit the accumulated knowledge of the ancients. Western scholars had maintained that they only translated Greek wisdom but lacked originality. The strange story of Ibn-al-Nafis about circulation demonstrates unsoundness of the assumption about Arabic literature.

Ibn-al-Nafis or Al-Qureshi (1210-1288 AD) was born in Damascus, where he studied medicine under Ibn-Essuri, and practiced medicine in both Syria and Egypt. He then became director of Al Mansauri hospital of Cairo, which was founded by the order and plan of the Sultan al Zahir. Nafis was honoured by his contemporaries as a learned physician, skilful surgeon, and an ingenious investigator. He was described as tireless writer and a pious man. His major literary work was- Commentary on Kitab-al-qunun it comprises of four books- Generalities, Materia Medica, Commentary on Head to toe diseases and Diseases not specific to any organs.

Ibn-al Nafis was known to be critical of Galenic dogma. In his greatest contribution to medicine he disputed Galen’s view that blood passes directly from right to the left side of heart. Nafis based his theory on finding that the wall between two ventricles is solid and without pores. Indeed, the septum is especially thick to prevent the direct passage of blood or spirit from ventricle to ventricle. He boldly stated that blood must pass from the right to the left
ventricle by way of the lungs. He described this idea in his commentary on the Canon of Avicenna. Ibn-al-Nafis thus became the first to describe the pulmonary circulation of blood. Somehow he considered that right ventricle has no active movement and postulated that heated blood rises up in the artery like vein. In the absence of any concept of blood circulation in the modern sense, his main contribution was, therefore, to amend an incorrect point in cardiac anatomy.

The writings of Ibn-Nafis were essentially ignored until 1924, when Dr. Muhayi ad Din at-Tawatit an Egyptian physician, presented his doctoral thesis to the medical faculty of Freiburg, Germany. If the copy of Tawatit’s thesis had not come to the attention of the historian Max Meyerhof, Nafisi’s discovery might have been forgotten again. Some texts of Nafis that were thought to be lost were rediscovered in 1950s

Ibn-al-Nafis died in Cairo in 1288. About 300 years after Ibn-Nafis, Miguel Servetus noted the same discovery apparently unaware of Ibn-Nafis’s earlier findings. The work of Nafis was translated into Latin in 1547: in 1553, Servetus was executed by burning in Geneva.