Review article

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Key words: spleen, anatomy, structure and function.

UDC 611.41

THE STRUCTURE OF THE SPLEEN (REVIEW)

ABSTRACT. Since the time of Hippocrates, it is believed that the spleen in the human body has a number of important functions. The spleen is a dark red organ located in the left hypochondrial region of abdomen. It is adjacent to the greater curvature of the stomach and within the omentum. It is an elongated organ, roughly triangular in cross section. The gross appearance and size of the spleen are variable, depending on the species and the degree of distension. The functions of the spleen are centered on the systemic circulation. As such, it lacks afferent lymphatic vessels. It is comprised of two functionally and morphologically distinct compartments, the red pulp and the white pulp. The red pulp is a blood filter that removes foreign material and damaged and effete erythrocytes. It is also a storage site for iron, erythrocytes, and platelets. In rodents, it is a site of hematopoiesis, particularly in fetal and neonatal animals. The spleen is also the largest secondary lymphoid organ containing about one-fourth of the body's lymphocytes and initiates immune responses to blood-borne antigens. Despite the comprehensive study of the development, structure and function of the spleen over the centuries, some questions about morphology of the organ remain controversial to this day. This paper presents a brief historical sketch, revealing some stages of development of scientific ideas about the structure and function of the spleen.

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Received: 26.02.2014
Accepted: 20.03.2014

Citation:
Voloshin VN. [The structure of the spleen (review)]. Morphologia. 2014;8(1):8-15. Ukrainian.

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