PROLOG

The Spleen and Lymphology

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During the evolution of the circulatory system, before discrete lymphatics emerged, clusters of lymphoid cells aggregated around blood vessels (1). Just as lymphatics only partially assumed the work of veins in absorption and drainage from the tissues, a few lymphoid aggregates remained somewhat outside the lymphatic system. The largest of these in man — the spleen — functions as part of both the immune and vascular systems. In response to physiologic stimuli and diseases, the spleen's structure and function undergo extraordinary changes as it comes to resemble a giant lymph node, hemolymph node, venous reservoir, decompression chamber, or even hematopoietic organ. The spleen may involute, enlarge, repopulate, and regenerate.

It is fitting therefore and indeed past due that lymphology — the study of lymphatics, lymph nodes, lymphocytes, and lymph — pay special homage to this "plenum mysterii organon". For like the rest of the lymphatic system, the spleen has stirred poetic passion since the ancients, often suffered neglect and disdain, remained somewhat forbidden territory for operative manipulation, and aroused interest only when diseased, injured or missing.

This special issue of Lymphology attempts to remedy our discipline's relative neglect of the orphan spleen. Various contributions focus on the history of insights into splenic function and the growing recognition of the spleen's role as a circulatory organ, reticuloendothelial filter, and lymphomyeloid communication center. Architecture, development, and function are each discussed in the context of pathologic conditions in man and experimental animals ranging from asplenism through hypspleenism and euspleenism to hypersplenism.

Another series of papers examines the consequences of the asplenic state, specifically the dreaded syndrome of fulminant postsplenectomy sepsis, which underscores the spleen's crucial role in neutralizing bloodstream invasion from a wide variety of microorganisms, typified by encapsulated bacteria (pneumococci) and protozoan parasites of malaria.

As the era of complacency regarding splenectomy draws to a close, alternatives to total removal are gaining increased acceptance in the management of traumatic rupture and even hypersplenism. In this light, the principles and goals behind various operative and nonoperative approaches to preserving the spleen are examined for feasibility and functional restoration.

As more conjecture than knowledge still exists about the spleen, as in most areas of lymphology, frontiers for future research are touched upon throughout this special issue.

Reference


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