

**Título:** Splenic changes in hepatosplenic schistosomiasis of man

**Autor(es):** Carla Rangel Leite, Aryon Barbosa Jr., André Luis M. Fernandes,

**Co-autor(es):** Zilton A. Andrade

**Instituição:** Centro de Pesquisas. Gonçalo Moniz (FIOCRUZ), Salvador, Bahia - Brasil

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Spleens obtained at splenectomy from patients with hepatosplenic schistosomiasis were submitted to histological, ultrastructural, immunocytochemical and morphometric examination, to clarify controversial aspects on schistosomal splenomegaly pathology. Normal spleens obtained from emergencial operations were used as controls. Changes were consistent with the diagnosis of congestive splenomegaly in all cases. Morphometric analysis through a Leica Image Processing and Analysis System showed that the compartment occupied by the red pulp was greater in schistosomiasis ( $p=0.0014$ ) than in controls. This was also true if the splenic cords ( $p=0.0062$ ) and the venous sinuses ( $p=0.0000028$ ) were isolately considered.

Fibrosis detected by sirius-red staining appeared in focal areas, especially in the marginal zone of lymph follicles and near splenic fibrous septa. The thickened splenic cords showed small quantity of fibrillar collagen (types I and III), but a relatively large amount of collagen type IV. Fibronectin and laminin were also prominent within the splenic cords. Under the electron microscope these cords presented a basement membrane like material as their main component, and a few fibrils with periodicity. The morphology of the white pulp was quite variable, even in a same spleen. Features of atrophy, sometimes with extensive fibrous replacement, appeared side by side with normal or hyperplastic lymph follicles. By morphometric evaluation both the size and the area occupied by the white pulp in schistosomal splenomegaly did not differ from those in normal controls

In conclusion, this study shows that the increase in splenic volume in hepatosplenic schistosomiasis is mostly due to congestive dilatation of the splenic sinuses and by thickening of the splenic cords by a basement membrane-like material, containing collagen IV and laminin.