

Título: Origin and fate of myofibroblasts in schistosomal portal fibrosis of man

Autor(es): Zilton A. Andrade and André Luis M. Fernandes

Co-autor(es):

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

Myofibroblasts in schistosomal portal fibrosis of man were investigated by light, electron and immunofluorescence microscopy of liver from 36 patients with hepatosplenic schistosomiasis. Myofibroblasts has been claimed to become frequent in portal fibrous tissue of schistosomal "pipestem" fibrosis. In the development of schistosomal fibrosis, myofibroblasts may participate in the synthesis of extracellular matrix and, due to their contractile properties, may play a role in the pathogenesis of portal hypertension.

Myofibroblasts were only identified in areas of smooth muscle dispersion related to portal vein damage. These cells were actin-positive and sometimes exhibited well developed rough endoplasmic reticulum. Away from these areas, the portal fibrous tissue showed densely packed and parallel collagen bundles, interspersed by long, thin cytoplasmic prolongations, but no cells with myoid features.

Myofibroblasts are thus transient cells in schistosomal portal fibrosis. They differentiate from smooth muscle and are subsequently transformed into fibroblast, while the vein is partially or totally "buried" into the fibrous tissue.