

## SUMMARY OF THESIS\*

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DIAS JUNIOR, Leonidas Braga - **Hepatopatias fulminantes/febres hemorrágicas na Amazônia: revisão histórica, padrões de lesão hepática e diagnóstico etiológico.** São Paulo, 2005. (Tese de Doutorado - Faculdade de Medicina da Universidade de São Paulo).

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### **FULMINANT HEPATIC FAILURE/HEMORRHAGIC FEVER IN AMAZON BASIN: HISTORICAL REVIEW, HEPATIC DAMAGE PATTERNS AND ETIOLOGICAL DIAGNOSIS**

This study aimed at assessing morphological and immunohistochemical aspects useful for the differential diagnosis of yellow fever (YF), Labrea hepatitis (LH) and other entities by revisiting 42 fulminant hepatic failure cases, from three historical series from Amazon Basin. Additional studies were performed aiming at further understanding the morphogenesis of hepatocellular death, in relation to regeneration and fibrosis patterns and to vascular lesions, as recently described in chronic hepatic diseases. Among the extensive panel of histological criteria studied, liver cell death pattern and distribution, including midzonal apoptotic bodies, as well as hepatocellular ballooning degeneration were YF most characteristic findings, while morula cells were the major hint for LH. Five cases were herein suggested as co-infected with YF, HBV and/or HDV, a finding not previously reported. Nineteen well characterized cases (10 YF and 9 LH) were further submitted to immunohistochemical studies for YF antigen, HBsAg and Delta virus Ag. In both diseases, but mainly in LH, phlebitis, mainly of portal vein branches, was evident and closely related to the degree of hepatocellular damage, with severe hepatic parenchymal extinction and portal tract approximation. Regeneration

pattern was also remarkable: in YF cases, a high hepatocellular proliferative index was detected whereas in LH, multinucleation and pseudo-acinar transformation, associated with portal type I collagen and elastic fiber deposition were found. In conclusion, immunohistochemical viral antigen detection yielded further etiological characterization of these important historical cases of fulminant hepatic failure from Amazon Basin, even in paraffin samples stored for up to seven decades. YF morphology depicted midzonal apoptosis, portal phlebitis and a high hepatocellular proliferative index, in patients without evidence of previous hepatic injury. On the other hand, fulminant LH showed extensive lytic hepatocellular necrosis, portal and hepatic vein phlebitis and the presence morula cells, in patients with morphological evidences of chronic liver disease.

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