Abstract

Background: a peculiar form of fulminant hepatitis known as Labrea hepatitis, probably related to hepatitis B and D, has been reported in Brazilian Amazon as early as the 1930s. Methods: we reviewed the postmortem liver biopsies of 9 patients with Labrea Hepatitis. Immunostaining for HBV and HDV antigens were performed. Results: we found several important characteristics in the liver tissues: 1) moderate hepatocellular necro-inflammation, 2) hepatocellular ballooning, 3) ballooned hepatocytes with fat droplets surrounding the nucleus (morula-like cells or spongiocytes) 4) mild to moderate necrosis and/or mild portoseptal fibrosis. Hepatitis B surface antigen (HBsAg) was identified in 7 of the 9 cases and was concentrated in the Morula-like cells. Hepatitis B core antigen (HBcAg) was present in 5 cases, mostly in the hepatocyte’s nucleous. The hepatitis D virus antigen (HDV Ag) was present in 5 cases, mostly in the cytoplasm and concentrated in the Morula-like cells. Conclusion: labrea hepatitis is a fatal disease mostly affecting isolated communities in the Amazon. Evidence implicates HBV and HDV in the etiology of this disease, but this hypothesis needs to be confirmed with genotyping and sequencing research on HBV DNA and HDV RNA extracted from the liver and sera of these patients.

Keywords
Labrea Hepatitis, Fulminant Hepatitis, Hepatitis D, Hepatitis B, Amazonia.