

## **MORPHOLOGIC FEATURES OF ACUTE AND/OR CHRONIC TRANSPLANT REJECTION IN LIVER BIOPSIES FROM PATIENTS WITH HEPATITIS C ONLY**

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**Objectives:** Differentiation of recurrent Hepatitis C from transplant rejection is a common problem in post-transplant liver biopsies. While bile duct damage is often seen in Hepatitis C, other features of rejection, such as endothelialitis, portal eosinophils and pericentral fibrosis, are not thought to occur. We examined a series of biopsies from patients with only Hepatitis C in order to determine whether features morphologically similar to rejection might in fact be present.

**Methods:** A set of 59 cases of core needle liver biopsies from patients with Hepatitis C were evaluated for the presence of morphologic features similar to transplant rejection, including bile duct damage, portal eosinophils, portal and central vein endothelialitis, ductopenia, vascular obliteration, pericentral fibrosis, and pericentral mononuclear cell infiltrate. Biopsies with other disease processes, such as steatohepatitis, were excluded.

**Results:** The percent occurrence of each morphologic feature was as follows: Bile duct damage (33%), portal eosinophils (41%), portal endothelialitis (19%), central vein endothelialitis (0%), pericentral mononuclear cell infiltrate (14%), ductopenia (2%), vascular obliteration (0%), and pericentral fibrosis (12%). There was no correlation of the morphologic features with Ludwig-Batts stage or grade.

**Conclusions:** The morphologic identification of transplant rejection in post-transplant biopsies from patients with Hepatitis C rests critically upon features, such as endothelialitis and eosinophils, not thought to be associated with Hepatitis C infection. This study shows that morphologic features similar to those found in acute rejection may indeed be found in association with Hepatitis C, while features resembling chronic rejection are much less common. Therefore, caution is needed in interpreting these features in post-transplant liver biopsies from patients with Hepatitis C.