## Role of fibronectin and complement in immunopathogenesis of acute and subacute hepatic failure.

Irshad, M; Acharya, KS; Joshi, YK; Tandon, BN

Date: 1994

## **Abstract:**

The present study describes the plasma levels of soluble fibronectin (FN), C3d, the breakdown product of C3 complement and Ba, the breakdown product of properdin factor B, in 30 patients of uncomplicated acute viral hepatitis (AVH), 64 patients of fulminant hepatic failure (FHF) and 29 patients of subacute hepatic failure (SAHF) with different hepatitis viral infections. Aetiological analysis of these patients demonstrated hepatitis B, hepatitis C and hepatitis non-A, non-B, non-C (NANB-NC) infections in 6.7, 13.3 and 80% cases, respectively, of the AVH group; 18.8, 42.2. and 39.0% cases, respectively, of the FHF group; and 31.0, 34.5 and 34.5% cases of the SAHF group. None of them had hepatitis A infection. The analysis of data showed that the plasma FN level was significantly reduced in patients with FHF and SAHF as compared to AVH patients and healthy persons. Fibronectin levels in AVH was comparable to that in the healthy group. Further, the FN level was not dependent on the nature of aetiological virus. The level of C3d in plasma was significantly high in all patients of FHF and SAHF, irrespective of their viral aetiology, compared to the AVH group and the healthy group. Like FN, the C3d level was comparable in the AVH and healthy groups. However, the Ba level was comparable to the normal value in all types of infections including the AVH, FHF and SAHF groups. These findings were used to explain the possible roles of fibronectin and complement in the immunopathogenesis of liver injury in patients of acute liver failure of viral aetiology.