Thrombocytopenia in Patients With Chronic Hepatitis C: A Possible Role of HCV on Platelet Progenitor Cell Maturation

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Abstract

A total of 30 patients with chronic hepatitis C (HCV) thrombocytopenia (TP) and 20 healthy controls were studied. Both groups were subjected to complete medical history, clinical examination in addition to assessment of hepatitis markers: level of thrombopoietin (Tpo), Geimsa-stained bone marrow smears, and in vitro short-term megakaryocytic progenitors culture (CFU-MK). Serum Tpo level was significantly elevated in patients with TP HCV. Short-term CFU-MK showed an evident depression in the colony-forming unit–megakaryocyte (CFU-meg). There is a positive correlation between the number of CFU-meg and the platelet count and between serum Tpo level and prothrombin time, transaminase, albumin, and the Child Pugh score of liver disease; a negative correlation between serum Tpo level and the number of CFU-meg and between serum Tpo level and the platelet count. Thus, the level of Tpo could be an indicator of intact functional response of the hepatocytes.