

Changes of the inflammatory activity and fibrosis in patients with alcoholic liver cirrhosis after autologous hematopoietic stem cell transplantation

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Abstract

Evaluation of treatment results of chronic liver diseases should be made on the basis of morphological analysis of liver biopsies. The aim of our study was to investigate the effect of autologous hematopoietic stem cell transplantation on histology activity index and grade of fibrosis in alcoholic liver cirrhosis patients. The study was performed on liver biopsies of 11 patients with alcoholic liver cirrhosis. Biopsies were taken before the injection of autologous peripheral blood stem cells into celiac trunk, 3 and 12 months after the procedure. Liver biopsy specimens were stained with hematoxylin-eosin and Van Gieson's. Results showed improvement of liver structure and decrease in histology activity index in liver biopsies performed 3 and 12 months after transplantation. Our data suggest that autologous transplantation of hematopoietic stem cell in patients with alcoholic liver cirrhosis is effective method that is capable to reduce inflammation activity in the liver, improve its structure and decrease liver fibrogenesis.

Keywords

Alcoholic liver cirrhosis, Hematopoietic stem cells, Liver fibrosis, Regeneration, Transplantation