
assessment of cd4&cd8 ymphocytes in paediatric shronic liver diseases using flow cytometry

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Many theories on the sequence of events leading to the development of chronic liver disease are centered on defect in T cell function (Dudly et al., 1972). This study was carried out to assess CD4, CD8 and CD4/CD8 ratio in children with chronic liver diseases using flow cytometry technique and to evaluate the superiority of such technique prior to older methods. Material of this study included 30 patients attending the pediatric gastroenterology unit, using flow cytometer, of the hematology department, central Medical research laboratories, of the Armed forces. Patients were classified into 15 cases which are chronic viral hepatitis, and 15 cases which are chronic bilharzial hepatitis. Careful clinical examination, liver function tests, hepatitis virus markers, abdominal sonography were done. All the thirty cases and Ten controls are investigated for CD4 (T.helper), CD8 (T suppressor/cytotoxic) and CD4/CD8 ratio (helper/suppressor ratio). Considering the liver function tests the serum bilirubin were elevated in the studied group in 33% cases with chronic viral hepatitis, and 13.3% in cases with chronic bilharzial hepatitis with highest level in chronic viral hepatitis group. The serum transaminases Got were elevated in 66% of cases with chronic viral hepatitis, GPT in 40%, alk. Ph in 33.3% and GGt in 46.6%, but in Got in cases with chronic bilharzial hepatitis GOT were elevated in 26% of cases, GPT in 20%, Alk.ph in 20% and GGt in 33.3% with highest level in chronic viral hepatitis, group. As regard markers in chronic viral hepatitis group 20% of children were HBsAg +e, 86% HBsAb +ve, 46.6% HBcAb +ve, 20% HBeAg +ve, 26.6% HBeAb +ve and that 26.6% had HCV Ab marker in their serum. This indicate that most etiologic agent in chronic viral hepatitis children were hepatitis B virus more than other hepatitis virus. In chronic viral hepatitis group the CD4 positive cells were increased so CD4/CD8 ratio were decreased in comparison to control group the difference between the studied groups were statistically significant (p