

CELLULAR IMMUNE REACTIVITY IN FULMINANT HEPATIC FAILURE
AND SUBACUTE HEPATIC FAILURE

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ABSTRACT

Role played by immune system in hepatocyte destruction is not yet known. An attempt was made to study the cellular mediated immunity in patients with fulminant hepatic failure (FH) and subacute hepatic failure (SAH). Migration inhibition factor (MIF) was investigated using purified preparation of HBsAg (Maini et al., 1973). Both HBV positive and negative patients were chosen for the study.

A diminished activity of MIF was found in 4/10 patients of FH and in 3/9 patients of SAH. In both FH & SAH, Five of the patients were negative for HAVAB-M as well as for all the markers of HBV. Survival patients in acute stage had a tendency of diminished MIF. It suggests that inhibition by HBsAg in acute stages may indicate clearing off the antigen while in persisting antigenaemia no response may be found.

Peripheral blood leucocyte cell population of thymus dependent (T) and thymus independent (B) was studied by the method of Naess, A.(1980). It showed an increase in T-active cells in the patients of SAH (51.75 ± 8.40) compared to healthy controls (48.6 ± 5.5) and FH (48 ± 5.6). Number of T-total cells remained similar in all the three categories. B cell population by rosette formation with antibody sheep erythrocytes (EArosettes) showed an increase in SAH (34.3 ± 10.6) compared to healthy controls (28.6 ± 10.4) and FH (26 ± 14.6). An increase in T-active cells in SAH may be due to an increase in null cell population.

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1. Maini, R.N., Roffe, L.M., Magrath, I.J. and Dumonde, D.C.(1973): Allergy, 45:308.
 2. Naess, A.(1980): Lymphocyte subpopulations in cerebrospinal fluid and blood. Thesis submitted to University of Bergen, Norway