

HOST FACTORS IN THE PATHOGENESIS OF AMOEBIC LIVER ABSCESS

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Nutritional - immunological and leucocyte function were studied in the pathogenesis of amoebic liver abscess 37 patients of amoebic liver abscess and 20 matched controls had nutritional assessment. Dietary history was recorded by 24 hour recall method. Serum protein, albumin, iron, iron binding capacity, vitamin A, B carotene and plasma cholesterol and triglycerides were estimated by standard methods. Dietary history suggested undernutrition of all the parameters which was confirmed by biochemical data.

Low calorie, protein and vitamin A state was produced in weanling rats. *Entamoeba histolytica* were inoculated in healthy and undernourished animals. Undernutrition of animals was associated with higher scores of amoebic liver abscess.

Serum immunoglobulin and cell mediated immunity by leucocyte migration index (LMI) were studied. The levels of IgG and IgA were raised in patients. LMI index in amoebic liver abscess was significantly lower (0.69) as compared to the controls (1.0). Neutrophil function by nitroblue tetrazolium test (NBT) was studied in 19 patients with amoebic liver abscess and 35 controls subjects. Test was repeated after clinical cure in 13 patients. All the liver abscess patients showed positive NBT test while controls had a negative test. NBT test became negative after specific therapy in 8 of the 13 patients.

Study of host factors in pathophysiology of liver abscess shows (a) Undernutrition of caloric-protein and vitamin A has probably a causative association (b) Leucocyte function is deranged, adversely affecting phagocytosis (c) Cell mediated immunity is preserved.

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