Entamoeba histolytica: elevated nitroblue tetrazolium reduction activity in polymorphs during amoebic liver abscess.

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Date: 1987

Abstract

Peripheral blood polymorphonuclear leucocytes (PMN) from patients with invasive amoebiasis, i.e. amoebic liver abscess (ALA) and acute amoebic dysentery, showed marked elevation of nitroblue tetrazolium dye (NBT) reduction. This dramatic change was not observed in PMN from patients with non-invasive amoebiasis, i.e. non-suppurative hepatic amoebiasis, or in asymptomatic Entamoeba histolytica cyst passers. A small number (12%) of patients with viral hepatitis displayed increased NBT reduction. 10 to 12 days after recovery following treatment, the majority (75%) of ALA patients failed to show increased NBT reduction. Our results suggest that the PMN-NBT reduction test could be useful as an aid to the diagnosis of ALA.