CHARACTERIZATION OF ~260 KD SURFACE ANTIGEN OF *PLASMODIUM FALCIPARUM* -INFECTED ERYTHROCYTES

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A panel of 15 Monoclonal antibodies raised against *P.falciparum* trophozoite-infected erythrocytes were characterized with respect to their ability to inhibit infected cell adherence to CD36-expressing CHO cells and their target antigens identified. Inhibition of infected cell adherence to CHO-CD36 cells was obtained with only one Monoclonal antibody (Mab12). Indirect immunofluorescence assay of methanol-fixed parasites using Mab12 showed a positive staining of infected erythrocyte membrane. Using Mab12, a 260 KD antigen (designated Ag12) was characterized by Western blot technique; Ag12 was mainly found in the SDS extracts. 80-95% of Sri Lankan and African *P.falciparum* isolates tested reacted with Mab12 indicating its reactivity with a conserved epitope, represented in isolates from different geographical areas. Another mab (Mab41) which recognized a family of 4 antigens that express EENV epitopes was used to demonstrate that this Ag12-260 KD antigen differs from the previously described malarial antigen D260 which is an internal antigen of trophozoite-infected cells, Ag12, as characterized by Western blotting co-migrated with ^{125}I surface labeled PfEMP1 antigen. Further anti 12.1 fusion protein antibodies immunoprecipitated ^{125}I-PfEMP1 and reacted with Ag12 on Western blot, and gave a positive statining of the surface of live intact trophozoite-infected erythrocytes in IFA. These results indicate that Ag12 may be exposed on the infected-cell surface and involved in cytoadherence; whether Ag12 and PfEMP1 are antigenically related or the same remains to be investigated.