A-01 : IN VITRO ROSETTING AND MICROAGGLUTINATION PROPERTIESOF *Plasmodium falciparum* INFECTED ERYTHROCYTES

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To understand the molecular mechanisms that lead to sequestration of *Plasmodi falciparum* trophozoite/schizont-infected cells and the low incidence of severe fo of the disease in Sri Lanka we analysed natural parasite populations for t cytoadherence properties and expression of surface antigens. Eighteen c preserved isolates from *Plasmodium falciparum* infected patients who had mild f of the disease were used in this study. Ring infected erythrocytes were culture *vitro* in original host red cells for 20-26 h to allow development to trophozoite schizont stage. In rosetting 4 isolates were strongly positive (38% - 78% of infe erythrocytes had formed rosettes). Ten isolates showed either intermediate (10 20%) or low (1% - 4%) rosetting while 4 isolates did not form rosettes. Parasite of the isolates did not correlate with their ability to form rosettes.

66% and 61% of isolates were positive and 23% and 28% of isolates were negativ the microagglutination assay and in the surface immunofluorescence a respectively. 11% of isolates were negative in both assays. This may reflect the of antigenic expression or the expression of globally rare phenotypes which are recognized by the pools of Sri Lankan and African hyperimmune sera. Howe these two isolates (11 %) were positive for rosetting (10% and 42% of infe erythrocytes formed rosettes) indicating that they expressed very rare phenot rather than the lack of expression of antigens on the surface of infected erythroc These results demonstrate that rosetting of these parasite populations i phenotypically diverse property and that there is a considerable antig polymorphism in the expression of erythrocyte surface antigens.