

## Observations of HAA in a Blood Donor/Recipient System in Thailand

Principal Investigators:           Michael W. Benenson, MAJ, MC  
  Robert B. Cotton, MAJ, MC  
  Robert McNair Scott, MAJ, MC  
  Dumrong Chiewsilp, M.D.<sup>1</sup>  
  Richard A. Grossman, M.D.<sup>2</sup>  
  Rapin Sritbhan, M.D.<sup>3</sup>  
  Franklin H. Top, Jr., LTC, MC

**INTRODUCTION:** This is a continuation and progress report on *Observations of HAA in a blood donor recipient system in Thailand* as it appeared in the SEATO Medical Research Laboratory, Annual Progress Report 1971-1972, pp 140-155. The study concerns the development of post-transfusion hepatitis in persons receiving units of blood containing Hepatitis B Antigen (HB-Ag, previously designated HAA). The donated units are identified and when transfused the unit is tested and the recipient categorized as either a recipient of positive or negative blood, the recipients of negative blood acting as a "control" population.

**OBJECTIVE:** To determine the results of the transfusion of blood containing Hepatitis B Antigen to a population of Thais where the antigen is highly endemic.

**PROGRESS:** Approximately 1000 more persons have been added to the study. The study population of persons followed more than 6 months has been expanded to over 125, and a similar number of controls have been followed for this period. In a number of cases, patients have now been followed for more than 12-18 months. New patients have not been admitted to the study since November 1972 and the input of patient data is essentially complete. Presently, improved techniques for HB-Ag and HB-Ab are being developed and will be used with the stored sera. Collation of the data is in progress. The data should provide information on the following important areas of consideration:

- (1) rate of development of HB-Ag after receiving a unit containing the antigen;
- (2) rate of development of clinical and sub-clinical hepatitis following transfusion of a unit containing the antigen;
- (3) persistence of developed HB-Ag;
- (4) time sequence of the development of HB-Ag and of hepatitis;
- (5) time sequence of SGOT rise and SGPT rise and an indication of the relative sensitivity and specificity of these tests for evaluation of liver disease;
- (6) the significance of prior possession of antigen or antibody with the subsequent receiving of a unit of blood containing HB-Ag or HB-Ab;
- (7) some indication of the relationship between HB-Ag and liver disease;
- (8) an indication of the prevalence of HB-Ag and HB-Ab among a population of ill persons requiring transfusion;
- (9) blood group differences in HB-Ag acquisition.

**SUMMARY:** This study has just completed its second year of follow-up. To date, 2840 persons have received transfusions and been followed in the study. Approximately 300 persons have been followed for 6 months or longer. Early data indicate that overt hepatitis following HB-Ag transfusion is a surprisingly rare occurrence in the study population.

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<sup>1</sup> Thai Component, SEATO Medical Research Laboratory

<sup>2</sup> School of Tropical Medicine, Mahidol University, Bangkok

<sup>3</sup> School of Public Health; Mahidol University, Bangkok