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Haemoglobin E in Vietnamese

SINCE its simultaneous discovery a decade ago in an American family of mixed Spanish, Guatemalan, and Indian ancestry¹ and in Thais², haemoglobin E has been found in a variety of ethnic groups a majority of which are located in the Middle East and Asia. It is particularly common among the peoples of south-east Asia where it had been found in relatively high incidence in Burmese³, Thais⁴⁻⁷ and Cambodians⁸, and in lower incidences in Vietnamese⁹, Malaysians^{10,11}, Indonesians¹², Chinese^{13,14} and Filipinos¹⁵. The results in this communication confirm the occurrence of haemoglobin E among Vietnamese.

Subjects for this investigation were residents of Saigon and environs. At the time of the work, during February and March 1964, they were patients in the Cho Quan Hospital, Saigon, where they had been admitted with diarrhoea during the cholera epidemic and were under treatment for dehydration. Red cells were obtained from residual heparinized blood samples collected for other diagnostic purposes and were preserved with merthiolate and by refrigeration prior to their transfer by air to the Biochemistry Department Laboratory of this Unit for analysis.

On receipt in the laboratory the red cells were washed with saline, mixed with equal volumes of distilled water, and frozen until used for electrophoretic analysis. After thawing, the samples were centrifuged and the supernatant haemolysates examined by Smithies's vertical starch-gel electrophoresis procedure¹⁶. The gel buffer employed was the tris-EDTA-borate buffer, pH 9.0, at the concentrations recommended by Goldberg¹⁷.

Results of the study indicate that 17, or 3.53 per cent, of the 482 subjects had A + E haemoglobins. No other abnormal haemoglobins were detected. Although no quantitative determinations were made of the relative amounts of haemoglobins A and E in the samples, haemo-

globin E was always the minor component. By inspection the E component was estimated to comprise from one-fifth to one-third of the total; in all cases it exceeded the levels to be expected for A₂ haemoglobin, which has the same electrophoretic mobility as E in the buffer employed.

Three cases of haemoglobin E, 2.7 per cent, were reported by Albahary *et al.*⁹ among their 113 Vietnamese subjects. Based on the results of both investigations the incidence of the gene for haemoglobin E in the Vietnamese appears to be lower than those in Thais, Cambodians, Burmese and Malaysians, similar to those of some of the Indonesians, and higher than those of Chinese and Filipinos.

Although our results with respect to haemoglobin E in Vietnamese agree with those of Albahary *et al.*⁹, we were unable to confirm their finding of a slow-moving component which they called haemoglobin 'Sud-Vietnam'. No slow component other than E or A₂ was found among our 482 subjects.

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Xg^a Investigations of the Family of a Child with a Ring X Chromosome

THE Xg blood groups reported under this title in the issue of November 21, 1964, presented some abnormal features¹. We recently had the opportunity to test the family and found the father, the mother, the daughter with the ring X chromosome, the normal daughter and the normal son all to be straightforward Xg(a+). Two examples of anti-Xg^a were used.

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