

β^S among Eti-Turks: haematological, clinical and genetic observations

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Abstract:

Haematological and genetic observations have been made on 71 SS Eti-Turk patients and their relatives from Cukurova (southern Turkey) and of immigrant families in The Netherlands. Similar data were collected for 25 Black patients and their relatives from Surinam, Netherlands Antilles, and Kenya. Haematological and clinical results were the same for both groups; the haemolytic anaemia in the Turkish patients was as severe as in the others. Haplotyping, involving nine restriction sites, identified haplotype 19 (Antonarakis et al, 1984) as the major type among the Eti-Turks; this chromosome has previously primarily been observed among SS patients from West Africa. The suggestion that the beta S-chromosome among Eti-Turks originates from that area is supported by a relatively high incidence of alpha-thalassaemia-2 (the 3.7 kb deletion), also frequently present in the Black population of West Africa, and by the absence of other major haplotypes, such as types 20 and 3, characteristic for the beta S-chromosome in the population of Central Africa and Kenya, and in Senegal, respectively. The Saudi Arabian type of beta S chromosome in association with the haplotype 19 beta S chromosome was present in only one Eti-Turk patient; this 30-year-old female was mildly affected and exhibited a high level of fetal haemoglobin.