

A further case of Hb J-Iran [beta77(EF1)His→Asp] in Muğla, Turkey

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To the Editor,

We read a recent paper in the journal by Atalay *et al.* describing Hb-J Iran in the province of Denizli, Turkey ^[1].

Hb J-Iran [beta77(EF1)His-Asp] is a rare hemoglobin variant, described first in Iran by Rahbar *et al.* in 1967 ^[2]. To date, several abnormal hemoglobins have been described from different regions of Turkey ^[3]. In Turkey, the first Hb J-Iran [beta77(EF1) His-Asp] case was reported by Arcasoy *et al.* ^[4]. There are four reported cases from the Turkish population, mostly from our group. These reported cases were from Ankara, Antalya and Muğla ^[4-6]. Here, we report the fifth family with two brothers having heterozygous cases of Hb J-Iran [beta77(EF1)His-Asp] from Muğla. These two cases were asymptomatic and detected during screening of the Muğla population.

A written informed consent for laboratory tests and DNA analysis was taken from their parents. There was a fast moving band ahead of Hb A in cellulose acetate electrophoresis. DNA was isolated with the standard phenol-chloroform extraction method. Non-radioactive fluorescence dye based DNA sequencing was performed by BECKMAN Coulter CEQ8000 genetic analysis

system as described previously ^[7]. Sequencing data revealed the presence of CAC>GAC mutation in heterozygous form at codon 77 corresponding to the heterozygous Hb J-Iran [beta 77(EF1)His-Asp].

It is interesting that almost all Hb J-Iran cases described so far in the Turkish population have been located around the Mediterranean coast. Muğla is located in the Aegean region of Turkey. It should be kept in mind that Hb J-Iran could be detected as a fast moving hemoglobin.

Further, our group reported Hb Hamadan also in this region in three unrelated families ^[7]. These findings revealed that in the past, there was an admixture of populations from Iran to the Aegean region of Turkey with immigration.

Another point that I would like to raise to Atalay *et al.* is that, in their discussion, they cited their study in Hemoglobin stating that Hb D Los Angeles is the most common variant in the Denizli region ^[8]. However, they did not state whether each variant belonged to one family. One other point is that generally the Hb S variant is not referred for further molecular analysis as it is easily detected by simple laboratory tests

such as sickling and solubility tests. Moreover, in two previous studies performed by two groups in the Denizli region, Hb S was found to be the most prevalent, with an incidence of 0.2 and 0.7, respectively. In one of the studies, two Hb S and two Hb D variants were detected, which was Hb Coughatta. In the other study, only Hb S was found in six individuals^[9-11].

Altay pointed out that the exact number of subjects having abnormal hemoglobins in Turkey is not known due to the absence of a national registry system for these conditions^[3]. As Atalay *et al.* proposed, a national hemoglobin variant registry should be established. This can be achieved under the auspices of the Turkish Hematology Association.

References

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