

haplotypic frequency of *HLA-G* -727C/1074A/1597C/3741_3754ins14/3775C was higher in the BD patients ($p = 0.046$) than in the controls (Table I).

HLA-G 3741_3754ins14 variant leads to splice out the 92-bp of exon 8 in 3'-UTR and induces a significantly lower mRNA level and a lower concentration of soluble *HLA-G* than the corresponding *HLA-G* mRNA isoform with the deleted 14bp (10). In conclusion, the *HLA-G* 3741_3754ins14 variant and the haplotype carrying this variant are associated with an increased risk for BD. These results suggest that the presence of the *HLA-G* 3741_3754ins14 variant which is related with lower mRNA level is probably associated with the development of BD.

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References

- ARACTINGI S, BRIAND N, DANFF CL *et al.*: *HLA-G* and NK receptor are expressed in psoriatic skin: A possible pathway for regulation infiltrating T cells? *Am J Pathol* 2001; 159: 71-7.
- KHOSROTEHRANI K, DANFF CL, REYNAUD-MENDEL B *et al.*: *HLA-G* expression in atopic dermatitis. *J Invest Dermatol* 2001; 117: 750-2.
- CAROSELLA ED, MOREAU P, ARACTINGI S, ROUAS-FREISS N: *HLA-G*: A shield against inflammatory aggression. *Trends Immunol* 2001; 22: 553-5.
- FOURNEL S, AGUERRE-GIRR M, HUC X *et al.*: Cutting edge: soluble *HLA-G1* triggers CD95/CD95 ligand-mediated apoptosis in activated CD8+ cells by interacting with CD8. *J Immunol* 2000; 164: 6100-4.
- LE DISCORDE M, LE DANFF C, MOREAU P, ROUAS-FREISS N, CAROSELLA ED: *HLA-G**0105N null allele encodes functional *HLA-G* isoforms. *Biol Reprod* 2005; 73: 280-8.
- INTERNATIONAL STUDY GROUP FOR BEHÇET'S DISEASE: Criteria for the diagnosis of Behçet's disease. *Lancet* 1990; 335: 1078-80.
- MATTE C, LACAILLE J, ZIJENAH L, WARD B, ROGER M: *HLA-G* exhibits low level of polymorphism in indigenous East Africans. *Hum Immunol* 2002; 63: 495-501.
- YAMASHITA T, FUJII T, WATANABE Y *et al.*: *HLA-G* gene polymorphism in a Japanese population. *Immunogenetics* 1996; 44: 186-91.
- HVIID TV, HYLENIUS S, HOEGH AM, KRUSE C, CHRISTIANSEN OB: *HLA-G* polymorphisms in couples with recurrent spontaneous abortions. *Tissue Antigens* 2002; 60: 122-132.
- HVIID TV, HYLENIUS S, RORBYE C, NIELSEN LG: *HLA-G* allelic variants are associated with differences in the *HLA-G* mRNA isoform profile and *HLA-G* mRNA levels. *Immunogenetics* 2003; 55: 63-79.

A molecular basis for the absence of familial Mediterranean fever in Ethiopian Jews

Sirs,

Familial Mediterranean fever (FMF) is the most prevalent hereditary inflammatory disorder (1). Four ethnic groups are classically affected: Armenians, Arabs, Turks and Jews. However, FMF is not equally shared among Jews. Non Ashkenazi Jews, i.e. Sefardi Jews, are far more affected than Jews from Europe.

Ethiopian Jews have been arriving in Israel in ever increasing numbers since around 1979. Today more than 50,000 Ethiopian Jews are living in Israel (2). In our experience, as well as in the English literature, no case of FMF has been reported in this community.

In the present study, we have searched for MEFV mutations (3, 4) in 95 unrelated unaffected Ethiopian Jews.

Ninety five adult Jewish subjects from Ethiopian ancestry (44 males, 51 females) were enrolled. All of them arrived in Israel during the last five years and were living in two immigration centers in the north of Israel. There is no identified Christian Ethiopian community in Israel so we could not include a control group of "non Jewish Ethiopian population" in our study. The subjects had no special medical history except for infections: one active pulmonary tuberculosis, one hepatitis B infection with cirrhosis and one HIV positive. The study received Helsinki committee approval and informed consent in Hebrew and Ethiopian language was obtained from every participant.

No subject was found to be either homozygous or compound heterozygous at the MEFV locus. One mutated allele was identified in 14 individuals. We found none of the most penetrant/severe mutations associated with FMF, i.e. at codons 694 and 680, nor other mutations in exon 10. A common polymorphism was identified, however (P706, 1%). In contrast, we detected a relatively high rate of mutations E148Q (6%), and P369S (1%) (Table I).

Table I. MEFV sequence variants in 95 unaffected Ethiopian Jews.

	N	%	95%CI
E148Q	11	6%	0.03-0.09
P369S	2	1%	0.001-0.03
P706*	1	0.5%	0.001-0.02
Mutations in exon 10	0	0%	0-0.02
All mutations*	14	7.5%	0.04-0.11
Carrier estimation		14%	0.09-0.19
Genetic FMF estimation		0.5%	0.001-0.02

* P706 is considered a polymorphism

Our study suggests a molecular basis for the absence of FMF in Ethiopian Jews.

The present report may contribute to the persistent debate of whether E148Q is a polymorphism or a true mutation (5-7). Recent studies have suggested that this mutation/polymorphism may enhance inflammation non-specifically, of possible advantage during evolution (8).

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References

- HELLER HSE, SHERF L: Familial Mediterranean Fever (FMF). *Arch Intern Med* 1958; 102: 50-71.
- AVICHAIL E: *The tribe of Israel. The lost and disappeared*. Amishav, Jerusalem 1989
- THE FRENCH FMF CONSORTIUM: A candidate gene for familial Mediterranean fever. *Nat Genet* 1997; 17: 25-31.
- THE INTERNATIONAL FMF CONSORTIUM: Ancient missense mutations in a new member of the RoRet gene family are likely to cause familial Mediterranean fever. *Cell* 1997; 90: 797-807
- AKSENTIJEVICH I, TOROSYAN Y, SAMUELS J *et al.*: Mutation and haplotype studies of familial Mediterranean fever reveal new ancestral relationships and evidence for a high carrier frequency with reduced penetrance in the Ashkenazi Jewish population. *Am J Hum Genet* 1999; 64: 949-62.
- BEN-CHETRIT E, LERER I, MALAMUD E, DOMINGO C, ABELIOVICH D: The E148Q mutation in the MEFV gene: is it a disease-causing mutation or a sequence variant? *Hum Mutat* 2000; 15: 385-6.
- TCHERNITCHKO D, LEGENDRE M, CAZENEUVE C, DELAHAYE A, NIEL F, AMSELEM S: The E148 Q MEFV allele is not implicated in the development of familial Mediterranean fever. *Hum Mutat* 2003; 22: 339-40
- BOOTH DR, LACHMANN HJ, GILLMORE JD, BOOTH SE, HAWKINS PN: Prevalence and significance of the familial Mediterranean fever gene mutation encoding pyrin Q148. *QJM* 2001; 94: 527-31.