Influence of HLA-B27 Subtypes on Ankylosing Spondylitis Phenotype: Comment on the Article by Akassou et al

Clinical Medicine Insights: Arthritis and Musculoskeletal Disorders
Volume 11: 1
© The Author(s) 2018
Reprints and permissions:
sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/1179544118785123

Sasan Fallahi[1,2]

[1]Internal Medicine Division, Baharloo Hospital, Tehran University of Medical Sciences, Tehran, Iran. [2]Rheumatology Research Center, Tehran University of Medical Sciences, Tehran, Iran.

To the Editor

I read the interesting review of Akassou and Bakri about the influence of HLA-B27 on ankylosing spondylitis (AS) phenotype which has been recently published in *Clinical Medicine Insights: Arthritis and Musculoskeletal Disorders*.[1] They concluded in the last row of Table 2, "Fallahi et al found lower markers of activity, better functional status, better quality of life and better spinal and hip mobility in patients with B*2704 and B*2707 compared with patients with B*2705 and B*2702 in Iranian population."[1] I should draw your attention to this fact that trend toward lower activity, better functional status, better quality of life, less intense dorsal kyphosis, and less decrease in cervical slope was found in patients with B*2704 and B*2707 versus B*27:05 and B*27:02. However, these differences were not statistically significant.[2] You should also note that the frequency of B*2704 and B*2707 in the study of Fallahi et al was limited to only 5.7% and 3.3% of 163 patients with AS, respectively.[2]

The small sample size of patients with B*2704 and B*2707 may be effective in not achieving a significant difference between B*27:04, B*27:07 group and B*27:05, B*27:02 group. Conversely, the age of onset of disease was earlier in B*27:04 compared with B*27:05 in Chinese population.[3] The occurrence of AS-associated uveitis was also more prevalent in B*27:04 compared with B*27:05 in Indian population.[4] In conclusion, genetic backgrounds together with unknown environmental factors could affect the results. However, a much larger survey needs to be designed in Iranian population so that we can compare clinical manifestations and severity markers of rarer Iranian subtypes (B27*:04 and B*27:07) with other common subtypes (B*27:05 and B*27:02).

Author Contributions

All of author contributions including interpretations, writing the manuscript, revise the manuscript and approve the final version of the paper were specified to SF.

REFERENCES

1. Akassou A, Bakri Y. Does HLA-B27 status influence ankylosing spondylitis phenotype? [published online ahead of print January 8, 2018].*Clin Med Insights Arthritis Musculoskelet Disord*. doi:10.1177/1179544117751627.
2. Fallahi S, Mahmoudi M, Nicknam MH, et al. Effect of HLA-B*27 and its subtypes on clinical manifestations and severity of ankylosing spondylitis in Iranian patients. *Iran J Allergy Asthma Immunol*. 2013;12:321–330.
3. Qi J, Li Q,, Lin Z, et al. Higher risk of uveitis and dactylitis and older age of onset among ankylosing spondylitis patients with HLA-B*2705 than patients with HLA-B*2704 in the Chinese population. *Tissue Antigens*. 2013;82:380–386.
4. Chavan H, Samant R, Deshpande A, Mankeshwar R. Correlation of HLA B27 subtypes with clinical features of ankylosing spondylitis. *Int J Rheum Dis*. 2011; 14:369–374.

RECEIVED: January 21, 2018. **ACCEPTED:** May 27, 2018.

TYPE: Letter to Editor

FUNDING: The author(s) received no financial support for the research, authorship, and/or publication of this article.

DECLARATION OF CONFLICTING INTERESTS: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

CORRESPONDING AUTHOR: Sasan Fallahi, Internal Medicine Division, Baharloo Hospital, Tehran University of Medical Sciences, Behdari Street, South Kargar Street, Tehran, Iran. Email: sfallahi@tums.ac.ir