

Review Form 3

Journal Name:	Asian Journal of Biochemistry, Genetics and Molecular Biology
Manuscript Number:	Ms_AJBGMB_124127
Title of the Manuscript:	HLA B27 locus in association with Ankylosing Spondylitis in Indian Population -an Updated Review and a single centre study
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>This manuscript holds significant importance for the scientific community as it provides updated insights into the association between HLA-B27 and ankylosing spondylitis (AS) in the Indian population. Given the genetic diversity of India, understanding the prevalence and implications of HLA-B27 in different regions is crucial for advancing diagnosis, treatment strategies for AS.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>"The title could be revised for clarity. While the study is based on data from a single center, it reflects the frequency of HLA-B27 across various cities in India. Additionally, the word 'locus' may not be appropriate since it doesn't seem to align with the study's scope, which does not focus on detecting the HLA-B27 locus. A more fitting title could be: '<i>HLA-B27 Frequency and its Association with Ankylosing Spondylitis in Indian Populations: A Multi-city Analysis from a Single-center Study.</i>' Or '<i>HLA-B27 Frequency and its Association with Ankylosing Spondylitis in Indian Populations: An updated review</i>'</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>Abstract: Its more of frequency of HLA B27 than the association of pathogenesis of AS, as the disease severity or associated clinical features, etc nothing is discussed.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Methodology: The methodology section, particularly the description of the RT-PCR method for detecting HLA B27, could benefit from more detail. The steps involved in the detection process, including sample preparation, amplification conditions, primer selection, primer properties, their references and interpretation of results, are critical for replicability of the procedure.</p> <p>Introduction: The introduction could have addressed the risk factors for Ankylosing Spondylitis (AS) in a more thorough manner. A detailed discussion on genetic predispositions, environmental triggers, and lifestyle factors contributing to AS would have added depth. Furthermore, the link between HLA B27 and AS could have been explored in greater detail. Comparative data on the prevalence of HLA B27 in different countries and its correlation with AS outcomes would have provided valuable context, enhancing the understanding of the disease on a global scale.</p> <p>Discussion: In the discussion section, the statement "HLA B27 positivity in relation to suspected AS disease progression was found to be more in men as compared to women and children" requires a clearer explanation. It is important to specify how the conclusion was drawn and to outline the criteria used to measure disease progression. Were there specific clinical markers or diagnostic tools applied, or was the assessment based on symptom severity and frequency?</p> <p>Similarly, the sentence "It shows the strongest association with suspected cases of AS. However, the older age group showed more degenerative changes and more pain in joints" needs further elaboration. The authors should explain how the older age group was evaluated for degenerative changes, and whether statistical comparisons were made between age groups to support this conclusion. Additionally, there is no mention of the statistical methods employed, which is a critical omission. The inclusion of statistical tests and their results (p-values, confidence intervals, etc.) would have strengthened the argument.</p> <p>Additional Considerations:</p> <ul style="list-style-type: none"> • The type of study conducted (e.g., retrospective, cross-sectional, or prospective) should be mentioned clearly. • The recruitment process for patients also requires clarification. Were patients selected based on specific clinical features or criteria for AS diagnosis, or were they referred based on a broader set of symptoms? 	

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	<ul style="list-style-type: none"> Low back pain (LBP), a common symptom in AS, has many differential diagnoses. It is essential to describe how other potential causes of LBP were excluded to ensure the accuracy of AS diagnoses in the study cohort. 	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript is scientifically robust because it is based on strong, existing evidence, applies a sound methodology, and produces clinically relevant insights that contribute to understanding the relationship between HLA-B27 and AS in the Indian population. The study's objective is clearly stated—to assess the frequency of HLA-B27 among suspected cases of AS in India and understand its diagnostic and prognostic value. Clear data on demographic distributions, such as age and gender, provide useful insights for understanding patterns of HLA-B27 positivity in the Indian population. The results are consistent with previous studies in terms of HLA-B27 positivity rates, with the study highlighting regional and gender-based variations. The paper highlights the relevance of HLA-B27 testing in early detection, which is important for early intervention and disease management in AS. This makes it useful in a clinical context, and the suggestion to include HLA-B27 testing in routine health checkups could influence public health strategies in India.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>:</p>	<p>More recent references can be added as many of them are not sufficiently recent. Also, the referencing style need to be consistent. Please follow the similarity in referencing. Ensure all references follow the selected format for both in-text citations and bibliography. Remove any inconsistencies, such as improperly formatted titles, or incomplete references.</p>	
<p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Yes</p>	
<p><u>Optional/General</u> comments</p>	<p>This manuscript provides a valuable contribution to the ongoing research on the genetic factors influencing ankylosing spondylitis, particularly in the context of the Indian population. The study effectively highlights the association between HLA-B27 and disease susceptibility, which could have important implications for both clinical practice and future research. However, expanding the study to include a more diverse, multi-center population could further strengthen the conclusions and increase its applicability across various regions in India. Overall, it lays a solid foundation for further exploration of genetic predispositions in autoimmune disease.</p>	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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