Sputum Neutrophilia and Severe Persistent Asthmatics

Sir,

The recent report on “sputum neutrophilia and severe persistent asthmatics” published in JCPSP 2014, vol. 24 (6):420-423, is very interesting.1 Naseem et al. concluded that “sputum neutrophilia is a frequent finding in cases with severe persistent bronchial asthma” and “presence of sputum neutrophilia in such cases can lessen the inappropriate use of corticosteroids with their associated long-term side effects.”1 It should be noted that the present report by Naseem et al. is not a complete diagnostic test study. There is no assessment on the diagnostic property (sensitivity, specificity, accuracy, etc.). Also, there is no evidence to support how “presence of sputum neutrophilia” can “lessen inappropriate drug use”. As a microscopic study, the sputum neutrophil count can be variant and the interpersonal difference can be expected. Combined neutrophil and eosinophil count is also suggested to be superior to single neutrophil count in classification of severity of asthma.2

REFERENCES

Authors’ Reply:
Let me first appreciate the reader's interest in our recently published study "Sputum Neutrophilia in Severe Persistent Asthmatics". 1. I agree that our study is not a complete diagnostic study or more correctly our study is not a validation study. As mentioned in the methodology, it is a cross sectional study of descriptive nature in which we only studied the frequency of sputum neutrophilia in severe persistent asthmatics (as per study objective), therefore, there is no need to calculate sensitivity, specificity, PPV and NPV, etc.
2. Regarding "use of sputum neutrophilia to lessen the inappropriate use of corticosteroids" is basically a practical management strategy, therefore, word "CAN" has been used. This is well supported in literature.1,2
3. Lastly, the comment that "use of combined neutrophil and eosinophil count is suggested to be superior to single neutrophil count in classification of severity of asthma". Again to classify asthma severity or cluster analysis (as was basically done in quoted study) was not the mandate of our study. However, even in the quoted study;3 as given in the resuslts; "Baseline lung function and sputum neutrophil percentages were the most important variables determining cluster assignment".
4. Use of sputum eosinophil and neutrophil counts for severity classification of asthma is an upcoming concept (2014) while our study was done in 2009 - 2010. Therefore, further studies to validate the same in our patients are required.

REFERENCES