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Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	2014_IJBcRR_12237
Title of the Manuscript:	Evaluation of Serum Level of Neutrophil Elastase, Superoxide Dismutase and Nitric Oxide In COPD Patients: Correlation With Lung Function Test
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	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)
Compulsory REVISION comments		
Minor REVISION comments	1. Minor typing / language/grammar amendments, as formulated below. This will help the scientific content to be better stressed out: “This is in accordance with the study of Garcia JM. et al. who found that mean values of FEV1% predicted was were significantly lower in smokers with airflow obstruction than in/for those without obstruction [14]. This reduction in lung function is might be due to persistant exposure of to tobacco smoke, which results in infiltration of inflammatory cells, mucus hypersecretion, thickening of airway wall...” lines 203-207 “The raised serum level of nitric oxide has as one of its most studied effects the ability to react with superoxide, to generate powerful oxidant peroxynitrite (ONOO-).” See lines 248-250. “Oxidants released from activated neutrophils ~~it~~-inactivates antiprotease α1-antityrpsin. Therefore the function of antiprotease alpha-1 antitrypsin to control the activity of protease neutrophil elastase is hampered, which results in increased activity of neutrophil elastase in COPD patients.” See Lines 225-228 „FEV1% predicted”, see line 188.	



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	"In our study we observed an increased the serum level of neutrophil elastase (NE)", lines 219, 220, or "In our study we observed an increase in the serum level of neutrophil elastase (NE)", lines 219, 220 "There is increasing evidence that endogenous nitric oxide (NO.) plays an important role....," lines 239, 240 It would be better to reformulate more clearly: "Fore most among the lines of biological defenses are (?) SOD [27]." lines 268-269 "Jain A et al studied the antioxidant status in cigarettes and bidi smokers and they found in their study, a lower level of erythrocyte SOD in bidi smokers than in cigarette smokers and healthy controls [42]. In the study of Gavali Y. et al, who the Authors found a decreased level of serum SOD in COPD patients, as compared to healthy controls [43].," lines 281-284 The findings of this study suggest that serum protease neutrophil elastase (NE) and oxidant nitric oxide (NO.) were increased, and enzymatic antioxidant superoxide dismutase (SOD) decreased with the decline of lung function parameter (FEV1% predicted) in COPD patients. 2. <u>If available</u>, the Authors should advance an explanation for: A <u>significant negative correlation</u> between serum neutrophil elastase / serum nitric oxide and FEV1% predicted was established in COPD patients, but <u>no correlation</u> was found between serum neutrophil elastase / nitric oxide and FEV1/FVC % ratio in COPD patients. The same for the correlation of superoxide dismutase with lung function parameters.	
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<u>Optional/General</u> comments	The Paper aims at the assessment of serum neutrophil elastase, superoxide dismutase and nitric oxide in <i>Chronic Obstructive Pulmonary Disease</i> patients and to establish correlation with lung function test. The Title and Abstract are suggestive for the content of the paper. The Introduction presents the correlations between oxidative stress (the ROS action) and COPD occurrence. The Section Materials and methods presents the selection of cases and control, the collection of blood samples, the estimation of Serum neutrophil elastase, superoxide dismutase, serum nitric oxide, the performing of pulmonary function test. The section Results reveals patients and control wellmatched with respect to age, sex and smoking history. Significant high levels of serum protease, neutrophil elastase and oxidant species such as serum nitric oxide (NO•) were reported in cases with COPD, as compared to healthy controls. The mean serum levels of superoxide dismutase proved lower for patients with COPD than for controls. The Authors found a significant negative correlation between serum neutrophil elastase and serum nitric oxide with FEV1% predicted in COPD patients. Moreover, they did not not found significant correlation between serum level of neutrophil elastase and nitric oxide, with FEV1/FVC % ratio in patients with COPD. A significant positive correlation has been found between superoxide dismutase and the Forced Expiratory Volume FEV1% predicted in COPD patients. No significant correlation between superoxide dismutase and Forced Vital Capacity FVC% predicted, or FEV1/FVC% ratio has been found in COPD patients. No significant correlation was observed between serum level of neutrophil elastase, nitric oxide and superoxide dismutase with the lung function parameters. The results are compiled in illustrative tables. The Section Discussions presents justifications for the results obtained in the present study, as well as correlations with results obtained by	
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	other Authors.	
	I recommend the Article for publication, with the minor changes explained.	

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