

Project No : 4070/2010

BIOCHEMICAL MARKERS OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Principal worker
MR VIVEK AMBADE

Unit
AFMC Pune

OBJECTIVES

1. To estimate levels of total antioxidant status, MDA, SOD, GSH-Px, CAT, Cp, TAS, A1AT, CRP, SPD in serum of COPD patients and healthy subjects
2. To compare the levels of these biological markers in healthy subjects and patients with COPD.
3. To determine the role of above parameters as markers of COPD.

METHODOLOGY

50 patients of COPD diagnosed as per GOLD guidelines from indoor and outdoor patients were selected. Also 50 normal age & sex matched individuals were taken from normal healthy individuals coming to Dept of Biochemistry for routine checkups. Fasting blood sample was collected from all subjects and analysed for the markers.

RESULTS

Serum levels of SOD, GPx, MDA, A1AT, SPD and CRP were significantly higher in COPD patients as compared to health controls. Serum levels of TAS were significantly lower in COPD patients as compared to healthy controls. No statistically significant difference was found in serum catalase levels.

CONCLUSION

In a laboratory set up serum GPx, CP, MDA, SPD, TAS and CRP appear to be most promising markers out of all studied in this study in diagnosis of COPD.