

Effects of Oxidative stress in Patients with Rheumatoid Arthritis

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The main objective of the study was to assess the oxidative stress in plasma and erythrocytes of rheumatoid arthritis patients by measuring the levels of thiobarbituric acid reactive substances (TBARS), non- enzymatic antioxidants (Vitamin E, C & reduced glutathione) and enzymatic antioxidants [(Superoxide dismutase (SOD), catalase (CAT), glutathione peroxidase (GSHPX)]. This study has been conducted on twenty adult female rheumatoid arthritis patients and an equal number of healthy subjects. The

levels of TBARS, non-enzymatic antioxidant and enzymatic antioxidants activities were measured using colorimetric methods. In the present study, elevated lipid peroxidation and multidirectional changes in the antioxidant defence system were noticed in patients with rheumatoid arthritis. The enhanced lipid peroxidation accompanied by disturbance in antioxidant status indicates that rheumatoid arthritis patients are more prone to free radical mediated oxidative damage.