Antioxidants *Status* in Hepatitis C Patients Before and After Antioxidant Supplementation

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Introduction: Hepatic C Virus (HCV) leads to increased production of Reactive Oxygen Species. **Objective/Methods:** Measure biomarkers of oxidative stress in healthy subjects (group I), compared to untreated HCV patients (group II), treated with interferon combined with ribavirin (group III), and supplemented with vitamin E (800mg/day), C (500mg/day) and zinc (40mg/day) for 6 months. **Results:** Significant increases in SOD and CAT activities in groups II and III compared to group I, increase in GST activity in group III compared to groups I and II, and a marked decrease in GR activity in group II compared to groups I and III, were found. TBARS concentrations showed a trend of increase in group II compared to group I, and protein carbonyl levels showed an increase in group III compared to groups I and II. Whole blood GSH concentrations showed only a tendency to decrease in both groups III and II compared to group I. Significant increases in ALT contents in group II compared to group I, and decrease of ALP contents in group II compared to both groups I and III were also found. After antioxidant supplementation a significant decrease in the activities of CAT and GST in both supplemented groups, a decrease in GR activitiy in group III, a decrease in TBARS concentrations in group II, an increase in GSH contents in groups II and III, were also found. **Conclusion:** Untreated HCV patients and also those treated with interferon combined with ribavirin are coping with oxidative stress, and the antioxidant supplementation conferred an antioxidant protection to both groups.