

**A5.59****The levels of serum total antioxidant status (TAS) and cytokines in hepatitis B virus (HBV) Infection**

G. Akca<sup>1</sup>, E. Avci<sup>2</sup>, G. Alp<sup>3</sup>, S. Tuncbilek<sup>4</sup> and S. Coskun Cevher<sup>5</sup>

<sup>1</sup>Gazi University, Microbiology, Ankara, Turkey, <sup>2</sup>Hitit University, Biology, Corum, Turkey, <sup>3</sup>Hitit University, Microbiology, Corum, Turkey, <sup>4</sup>Ufuk University, Y' nfection Dieases and Clinical Microbiology, Ankara, Turkey, <sup>5</sup>Gazi University, Biology, Ankara, Turkey

Inflammatory-immune damage occurs in liver pertaining to Hepatitis B virus. Reactive oxygen species(ROS) are also considered to be the cause of this damage. However, antioxidant protection systems are formed against the deteriorating effects of ROS in organisms. It was aimed to detect and compare total antioxidant and cytokines(IL-2, TNF-a) levels of chronic and occasionally diagnosed inactive HBsAg carriers. In this study, 25isolated anti-HBc total(+), 25HbsAg and anti-HBc total(+) patients' sera, 20chronic HBV patients' sera and 10 healthy people's sera (control group) were used. The mean values of TAS were found  $1.29 \pm 0.20$  mmol in chronic HBV patients,  $1.24 \pm 0.15$  mmol in inactive HBsAg carriers,  $1.16 \pm 0.5$  mmol in isolated anti-HBc(+) patients and  $0.93 \pm 0.10$  mmol in control group as Trolox equivalent/l. The results revealed that there was no statistically significant difference among the patients' group as a statistically significant difference was found between the control and the patients' groups ( $p < 0.05$ ). Moreover, TAS values of isolated anti-HBc(+) and inactive HBsAg(+) carrier patients were found to be higher than control group as it was seen in HBV infected patients similarly. The result pointed out that the disease was progressing chronically. Besides, there was a significant increase in the levels of TNF-a and IL-2 in chronic HBV. It was concluded that the detection of serum TAS values and cytokines levels could be considered very important for the anticipation of the progression and ongoing to chronic hepatitis of HBV infected patients.