# SUMMARY AND CONCLUSION

Hepatocellular carcinoma is becoming one of the most frequent forms of cancer through the world with particular high rates observed in Asia, Africa and South Pacific ***(Beasley et al., 1981).***

In Egypt, ***Mokhtar (1990)*** reported that the incidence of HCC was 3.7% of the total number of malignant cases received at the pathology department, NCI, Cairo University in the period (1985-1987).

IL-8 and GM-CSF are important mediators of inflammation and immune response in human diseases. In particular situations IL-8 and GM-CSF are produced excessively by immunoregulatory cells and it may be released in the circulation ***(Al-Wabel et al., 1995).***

The aim of this work is to detect the levels of IL-8 and GM-CSF in hepatocellular carcinoma patients and study the role of these cytokines in the pathophysiological process of the disease.

In this study, two groups were tested, one patient group and one control group, the patient group includes (27) cases with definite diagnosis of HCC. The control group included (10) persons who were completely normal healthy persons with no history of liver diseases, and were negative for serum HBsAg and HCV Ab.

Sera of these groups were examined for measurement of IL-8 and GM-CSF level by ELISA technique after routine haematological examination and liver function tests. Also sera of patient and control

groups were examined for detection of AFP, biliurbin, HBsAg and HCVAb.

**From our study we concluded that:**

Most patients with HCC were positive for HBsAg and/or HCVAb, 22% of patient were positive for HBsAg in comparison to 70% who were positive for HCVAb, also liver cirrhosis had been detected in 66% of patients as proved by pathological specimens.

Alpha feto-protein (AFP) level was significantly increased in patient group more than control group.

Interleukin-8 (IL-8) was undetectable in control group while in patient group it was detected in a mean of 116.49 pg/ml, the serum level of IL-8 was higher in patients associated with HBV or HCV infection more than patients with no evidence of HBV or HCV infection. Also IL-8 serum level was detected as higher levels in HCV +ve patients more than HBV +ve patients.

Granulocyte macrophage colony stimulating factor (GM-CSF) was detected in both groups but its level was significantly higher in patients group than in control group. Also it was in significantly higher inpatients with no evidence of HBV or HCV infection.