

Chapter Five

Discussion

5.1 Discussion:

The present study involves forty cases of liver carcinomas for immunohistochemical staining by hepar-1.

Regarding the age of the population, the study revealed that most of patients were more than 50 years old. This result compatible with El-Serag and Rudolph (2007), who reported that liver cancer is considered as a malignancy influencing mainly those aged 65 and older.

The study revealed that most of patients are men, female/male ratio was 1:4, and differences in sex hormones might explain the lower female/male ratio. This result agrees with Dongyun *et al.* (2014), they reported that men are 4 to 8 times more likely to develop liver cancer than women specially hepatocellular carcinoma because estrogen may protect against hepatocarcinogenesis and promote a more favorable biology once develops. Also agree with Julius *et al.*(2016), they reported that HCC occurs more often in males, however, this may not be due to sex alone. Males are more likely to be infected with viral hepatitis, consume greater quantities of alcohol, smoke cigarettes, and have a higher body mass index than women.

The positive expression of Hepar-1 was seen most in hepatocellular carcinomas (37.5%). This result showed significant relation between Hepar-1 expression and diagnosis of liver cancers (P. value 0.002). This result compatible with Hanif and Mansoor, (2014), they reported that Hepar-1 is a reliable immunohistochemical marker for cases of hepatocellular carcinoma (HCC). It can be used along with other markers in morphologically difficult cases.

The study revealed there is a role of hepar-1 as marker of differential diagnosis of liver carcinomas and Hepar-1 expression is mostly associated with Hepatocellular carcinoma and it is reliable marker that recommended for the initial step of differential diagnosis between hepatocellular carcinomas and Adenocarcinomas and for the confirmation of the histologic diagnosis.

5.2 Conclusion:

On basis of this study we conclude:

- The age of the liver cancer among our study population is commonly more than 50 years.
- Most histological type of Liver cancer in the study samples is Hepaocellular carcinoma.
- Hepar-1 expression is associated with Hepatocellular carcinomas.

5.3 Recommendation:

On basis of this study we recommend:

- Further study should be done on expression of Hepar-1 in liver cancer with large sample size.