

**ABSTRACT**

Hepatocellular carcinoma is the third most common cancer of gastrointestinal in Southeast Asia with incidence 626.000 cases every year worldwide. AFP level  $\geq 400$  ng/ml and USG result can be used as diagnosis parameter of hepatocellular carcinoma. Because of that, this study designed to analyse the AFP level's profile in hepatocellular carcinoma. Descriptive methods used in this study with collected data from medical records on patients that fulfilled inclusion criterias in Dr. Soetomo General Hospital during the periods of January 1<sup>st</sup> 2013-December 31<sup>st</sup> 2015. Researchers used various variables such as age, gender, etiology and size of tumor, number of nodul, hepatic function with Child classification, staging BCLC, and also AFP level. This study found that from 98 patients of hepatocellular carcinoma with high AFP level or  $>400$  ng/ml dominated with younger patients and the average age is 49.91 years, the etiology is hepatitis B (56.8%), bad result of laboratory test (SGOT, SGPT), patients with all level hepatic function based on Child-Pugh classification and staging B of tumor (70.5%). Patients with normal AFP  $\leq 20$  ng/ml dominated with etiology other, and staging BCLC A and C, and female patients. There is no difference of AFP level based on number of nodul and size of tumor. In conclusion, the most common patients with high AFP level is which has hepatitis B as etiology, younger age, male gender, high SGOT level and staging BCLC B.

**Keyword:** Hepatocellular Carcinoma, AFP