

ABSTRACT

RELATIONSHIP BETWEEN FIBRINOGEN LEVEL AND VON-WILLEBRAND FACTOR IN PATIENTS OF LIVER CIRRHOSIS

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Liver cirrhosis is a pathological condition describing the end stadium of hepatic fibrosis that continues progressively marked by the distortion of hepatic architecture and the formulation of degenerative nodules. Complication of cirrhosis that oftenly had fatal effects was the esophageal varices bleeding. The hemostatic disorders to the cirrhosis were complex, involving many processes and participated factors. The last theory suggested that in the cirrhosis, it found disequilibrium between the prohemostatic and antihemostatic. In the prohemostatic, one of them had an increase of the level of von-Willebrand factor, whereas in the antihemostatic there was a decrease of plasmatic fibrinogen level.

Currently, there was not any data showed the correlation between the level of plasmatic fibrinogen and von-Willebrand factor in the patients of cirrhosis in Indonesia, especially in Yogyakarta. This study aimed to find the correlation between the level of plasmatic fibrinogen and von-Willebrand factor in the patients with cirrhosis.

The design of this study was cross-sectional design. Samples were obtained by the *consecutive sampling*. Subjects of the study were the patients of liver cirrhosis who visited as outpatient and inpatient in the Department of Internal Medication of Dr. Sardjito Hospital between October 2010 to August 2011, and who already met the inclusion and exclusion criterias. The correlation between the level of plasmatic fibrinogen and von-Willebrand factor was assessed statisticly using correlation test. The final result of correlation test was stated in the correlation coefficient.

There were 16 subjects that met criterias, 16 males and 3 females, age average was $55 \pm 7,528$. Cause of cirrhosis 31,25% was viral hepatitis infection. As much 62,5% subject was Child Pugh's B and 37,5% was Child Pugh's C. Mean of plasma fibrinogen was $227,39 \pm 75,82$ mg / dL, meanwhile von Willebrand's factor mean was $217,43 \pm 16,96$ %. Pearson's correlation coefficients between fibrinogen and von Willebrand factor was $r = -0,216$ ($p = 0,211$). In conclusion, there was negative correlation between plasma fibrinogen and von Willebrand's factor in liver cirrhosis patients.

Keywords: *fibrinogen, von Willebrand factor, cirrhosis*