

INTISARI

Latar Belakang. Karsinoma hepatoseluler (KHS) adalah tumor paling sering pada tumor hepar primer, terhitung sekitar 85-90% dari seluruh keganasan hepar primer. Insidensi KHS di seluruh dunia semakin bertambah, menjadi tumor paling sering kelima di dunia. Trombositopenia dianggap sebagai faktor prediktif dan prognostik KHS. Beberapa penelitian membuktikan bahwa ada keterkaitan yang sangat erat antara jumlah trombosit dengan perkembangan agresifitas KHS, seperti peningkatan ukuran tumor, invasi tumor, dan metastasis pada KHS, yang mungkin saja berhubungan dengan gambaran radiologi CT KHS berdasarkan modifikasi BCLC.

Tujuan. Mengetahui adanya korelasi antara jumlah trombosit dengan gambaran radiologi CT KHS berdasarkan modifikasi BCLC pada pasien KHS.

Bahan dan Metode. Subyek penelitian terdiri dari 52 citra *multislice computed tomography scanning* (MSCT scan) abdomen 4 fase mulai Juni 2016-Februari 2018 di RSUP Dr. Sardjito Yogyakarta. Interpretasi dilakukan pada citra CT scan abdomen 4 fase yang didiagnosis dengan KHS, telah dibuktikan dengan pemeriksaan histopatologi disertai pemeriksaan jumlah trombosit. Dilakukan uji korelasi dengan Spearman antara lesi tumor KHS berdasarkan modifikasi BCLC dengan jumlah trombosit. Lesi tumor KHS berdasarkan modifikasi BCLC dikelompokkan dalam empat kategori yakni tunggal ≤ 2 cm, tunggal atau hingga 3 nodul ≤ 3 cm, > 3 nodul > 3 cm dan tunggal atau lebih dengan trombus vena porta dan/atau limfadenopati dan/atau metastasis. Untuk jumlah trombosit dikelompokkan dalam tiga kategori yakni $< 150 \times 10^9/l$, $150 - 400 \times 10^9/l$, dan $> 400 \times 10^9/l$.

Hasil. Dari 52 subyek penelitian didapatkan 40 (76,9%) laki-laki dan 12 (23,1%) perempuan dengan rerata usia 56,17 tahun mulai dari usia 22 tahun hingga 83 tahun. Etiologi paling sering adalah infeksi virus hepatitis B yaitu 25 (48,1%), HCV 14 (26,9%) dan lain-lain 13 (25%). Tidak terdapat subjek dengan KHS klasifikasi BCLC 0 dan A. Klasifikasi BCLC B 23 subjek (76,6%) terbanyak pada jumlah trombosit $150.000-400.000 \text{ sel/mm}^3$, Klasifikasi BCLC C 16 subjek (72,2%) terbanyak pada jumlah trombosit $150.000-400.000 \text{ sel/mm}^3$.

Kesimpulan. Tidak terdapat korelasi yang bermakna secara statistik antara temuan CT-Scan Hepar pada KHS berdasarkan modifikasi klasifikasi BCLC dengan jumlah trombosit ($p=0,962$).

Kata Kunci : Jumlah Trombosit, Karsinoma Hepatoseluler, Barcelona Clinic Liver Cancer

ABSTRACT

Background : Hepatocellular carcinoma (HCC) is the most common primary tumor, approximately 85-90% of all primary liver malignancies. The incidence of HCC is increasing, becoming the fifth most frequent tumor in the world. Diagnosis of HCC is usually with imaging modalities, biopsy or tumor markers of Alfa Fetoprotein (AFP). Thrombocytopenia is considered a predictive and prognostic factor of HCC. Several studies have shown that there is a very close relationship between platelet counts with the development of KHS aggressiveness, such as increased tumor size, tumor invasion, and metastasis in KHS, which may be related to the radiographic features of the KHS CT based on BCLC modification.

Objective: To prove the correlation between platelet count and radiographic features of CT KHS based on BCLC modification in KHS patients.

Material and Methods : The study subjects consisted of 52 multislice computed tomography (MSCT) abdominal scanning (4-phase) images from June 2016-February 2018 in Dr. Sardjito Yogyakarta. Interpretation is carried out on a 4-phase CT scan of the abdomen diagnosed with KHS, which has been proven by histopathological examination accompanied by examination of platelet counts. Spearman correlation test was performed between KHS tumor lesions based on modified BCLC with platelet counts. KHS tumor lesions based on BCLC modification are grouped into four categories namely single ≤ 2 cm, single or up to 3 nodules ≤ 3 cm, > 3 nodules > 3 cm and single or more with portal venous thrombus and / or lymphadenopathy and / or metastasis. For platelet counts are grouped into three categories namely $<150 \times 10^9 / l$, $150 - 400 \times 10^9 / l$, and $> 400 \times 10^9 / l$.

Results: From 52 study subjects found 40 (76.9%) men and 12 (23.1%) women with an average age of 56.17 years ranging from ages 22 years to 83 years. The most common etiologies were hepatitis B virus infection, 25 (48.1%), HCV 14 (26.9%) and 13 others (25%). There are no subjects with KHS BCLC classification 0 and A. Classification of BCLC B 23 subjects (76.6%) the highest number of platelets 150,000-400,000 cells / mm³, BCLC Classification C 16 subjects (72.2%) the most in the number of platelets 150,000- 400,000 cells / mm³.

Conclusion: There was no statistically significant correlation between the findings of Hepar CT scan on KHS based on the modification of BCLC classification with platelet count ($p = 0.962$).

Keyword : Platelet count, Hepatocellular Carcinoma, Barcelona Clinic Liver Cancer