KORELASI POLA METASTASIS HATI PADA PEMERIKSAAN *COMPUTED TOMOGRAPHY* (CT) *SCAN* DENGAN SUBTIPE IMUNOHISTOKIMIA PADA PASIEN KANKER PAYUDARA

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INTISARI

Latar belakang:Kanker payudara merupakan penyebab utama kelima kematian di seluruh dunia. Salah satu faktor yang menyebabkan tingginya angka kematian tersebut adalah metastasis. Hati merupakan lokasi ketiga yang paling sering mengalami metastasis. CT *scan* merupakan modalitas dominan dalam evaluasi dugaan metastasis hati yang paling sensitif dengan tingkat deteksi keseluruhan 81-94% .Dan dikaitkan dengan subtipe imunohistokimia.
Tujuan penelitian: Mengetahui korelasi pola metastasis hati pada pemeriksaan CT scan dengan subtipe imunohistokimia pada pasien kanker payudara
Bahan dan Cara: Penelitian ini adalah penelitian observasional analitik kuantitatif dengan desain cross sectional . Subjek penelitian adalah semua pasien kanker payudara secara imunohistokimia dengan metastasis hati secara pemeriksaan CT scan abdomen yang terdata di PACS radiologi RSUP Dr Sardjito Yogyakarta periode tahun 2018 hingga juni 2020.
Hasil: didapatkan subjek 50 penelitian yang memenuhi kriteria inklusi dan eksklusi. Analisis univariat Dari 50 subjek penelitian didapatkan sebaran usia <40 tahun sebanyak 7 subjek (14%) dan paling banyak adalah usia >40 tahun sebanyak 43 subjek (86%) dengan rata-rata usia 52, 8 tahun. Distribusi subtipe imunohistokimia terbanyak yaitu HER 2 sebanyak 31 (62%). Distribusi jumlah lesi terbanyak yaitu lesi multipel sebanyak 32 (64%). Distribusi lokasi lesi didominasi oleh lobus kanan sebanyak 28 (56%). Distribusi ukuran lesi terbanyak yaitu <3 cm sebanyak 35 (70%). Distribusi pola penyangatan terbanyak yaitu homogen sebanyak 43 (86%). Distribusi densitas lesi meliputi hipodens 47 (94%). Analisis bivariat diketahui usia ≥ 40 tahun paling banyak ditemukan pada seluruh subtipe imunohistokima (Luminal A = 14%, Luminal B = 22%, dan HER2 = 50%). Usia <40 tahun paling banyak ditemukan pada subtipe HER 2 (12%). Jumlah lesi paling banyak ditemukan subtipe HER 2 lesi multipel (42%). Berdasarkan lokasi lesi banyak ditemukan subtipe HER 2 pada lobus kanan (38%). Pada ukuran <3cm paling banyak ditemukan pada HER2 (36%), sedangkan pada ukuran >3cm paling banyak ditemukan di HER 2 (26%). Pada Pola penyangatan homogen paling banyak ditemukan pada seluruh subtipe imunohistokima (HER 2=52%, Luminal B=22%, luminal A=14%). Densitas lesi yang paling banyak ditemukan pada seluruh subtipe imunohistokimia adalah hipodens (luminal A 16%, luminal B 20% dan HER-2 58%).
Kesimpulan: Terdapat korelasi yang bermakna secara statistik antara subtipe imunohistokimia dengan ukuran lesi ($p< 0,05$) dengan arah korelasi positif dan kekuatan korelasi lemah ($r = 0,334$). Tidak terdapat korelasi antara jumlah lesi, lokasi lesi, pola penyangatan serta densitas terhadap subtipe imunohistokimia.

Kata kunci : Metastasis hati, Kanker Payudara, Imunohistokimia, CT scan

CORRELATION OF HEART METASTASIS PATTERNS ON COMPUTED TOMOGRAPHY (CT) SCAN WITH IMMUNOHYSTOCHEMICAL SUBTYPE IN BREAST CANCER PATIENTS

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ABSTRACT

Background: Breast cancer is the fifth leading cause of death worldwide. One of the factors that causes the high mortality rate is metastasis. The liver is the third most common site for metastases. CT scan is the dominant modality in the evaluation of suspected liver metastases and is the most sensitive with an overall detection rate of 81-94%. It is associated with immunohistochemical subtypes.

Objective: To determine the correlation between the pattern of liver metastases on CT scan examination with immunohistochemical subtypes in breast cancer patients

Materials and Methods: This research is a quantitative analytic observational study with a cross sectional design. The research subjects were all immunohistochemical breast cancer patients with liver metastases by abdominal CT scan examination recorded at PACS radiology Dr Sardjito Hospital Yogyakarta period 2018 to June 2020.

Results: 50 research subjects were obtained. Univariate analysis From 50 research subjects, 7 subjects were found to be <40 years old (14%) and the most were >40 years old as many as 43 subjects (86%) with an average age of 52.8 years. The distribution of the most immunohistochemical subtypes was HER 2 as many as 31 (62%). The distribution of the highest number of lesions was multiple lesions as many as 32 (64%). The distribution of the lesion location was dominated by the right lobe as much as 28 (56%). The most distribution of lesion size <3 cm was 35 (70%). The distribution of the reinforcement pattern was mostly homogeneous as much as 43 (86%). The distribution of lesion density was hypodense 47 (94%). Bivariate analysis revealed that age 40 years was the most common in all immunohistochemical subtypes (Luminal A = 14%, Luminal B = 22%, and HER2 = 50%). Age <40 years was most common in HER 2 subtype (12%). The highest number of lesions was found in the HER 2 subtype, multiple lesions (42%). Based on the location of the lesion, HER 2 subtype was found in the right lobe (38%). Those <3cm were most commonly found in HER2 (36%), while those >3cm were most commonly found in HER2 (26%). The homogenous reinforcement pattern was found in all immunohistochemical subtypes (HER 2=52%, luminal B=22%, luminal A=14%). The most common lesion density in all immunohistochemical subtypes was hypodense (luminal A 16%, luminal B 20% and HER-2 58%).

Conclusion: There was a statistically significant correlation between immunohistochemical subtypes and lesion size ($p < 0.05$) with a positive direction of correlation and weak correlation strength ($r = 0.334$). There was no correlation between the number of lesions, the location of the lesions, the enhancement pattern and the density of the immunohistochemical subtypes.

Keywords: Liver metastases, breast cancer, immunohistochemistry, CT scan