

PERBANDINGAN KARAKTERISTIK PENCITRAAN *COMPUTED TOMOGRAPHY* EFUSI PLEURA MALIGNA PADA PASIEN KANKER PAYUDARA DENGAN EFUSI PLEURA BENIGNA

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INTISARI

Latar Belakang dan Tujuan. Efusi pleura dapat menjadi tanda perkembangan atau rekurensi penyakit kanker payudara. Membedakan efusi pleura maligna dengan benigna penting dalam menentukan terapi yang tepat. Pemeriksaan sitologi cairan pleura tetap merupakan baku emas diagnosis efusi pleura maligna dan benigna, namun *Computed Tomography (CT) scan* toraks dilaporkan memiliki sensitivitas dan spesifisitas tinggi. Tujuan penelitian adalah menentukan perbedaan karakteristik hasil citra CT *scan* efusi pleura maligna karena metastasis pleura kanker payudara dengan efusi pleura benigna eksudatif.

Bahan dan Metode. Penelitian analitik komparatif dengan pendekatan *cross-sectional* ini menggunakan data sekunder karakteristik hasil citra CT *scan* toraks dengan data hasil sitologi cairan pleura yang terbagi dalam kelompok maligna dan benigna. Karakteristik hasil citra CT *scan* toraks yang dinilai adalah densitas efusi pleura, estimasi besar volume efusi pleura, lokasi efusi pleura, nodul pleura, penebalan pleura irregular (penebalan pleura fokal, sirkumferensial atau mediastinum).

Hasil. Didapatkan 50 pasien efusi pleura yang terdiri dari 25 pasien efusi pleura maligna karena metastasis pleura kanker payudara dan 25 pasien efusi pleura benigna eksudatif karena TB pulmo, pneumonia, SLE dan emboli pulmo. Analisis komparatif menunjukkan nilai signifikan pada karakteristik densitas efusi pleura ($p=0,009$), nodul pleura ($p=0,00$), penebalan pleura *irregular* fokal ($p=0,005$) dan penebalan pleura mediastinum ($p=0,002$) sedangkan nilai yang tidak signifikan pada karakteristik estimasi volume efusi pleura ($p=0,312$), lokasi efusi pleura ($p=0,390$) dan penebalan pleura sirkumferensial ($p=0,247$).

Kesimpulan. Karakteristik hasil citra CT *scan* toraks densitas efusi pleura, nodul pleura, penebalan pleura *irregular* fokal dan penebalan pleura mediastinum menunjukkan perbedaan yang signifikan pada efusi pleura maligna dan benigna.

Kata Kunci: Efusi pleura eksudatif, metastasis pleura kanker payudara, *Computed Tomography (CT) scan*.

COMPARATION OF CHARACTERISTICS COMPUTED TOMOGRAPHY FINDING OF MALIGNANT PLEURA EFFUSION IN BREAST CANCER PATIENTS WITH BENIGN PLEURA EFFUSION

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ABSTRACT

Background and Purpose. Pleural effusion can be a sign of progression or recurrence of breast cancer disease. Differentiate benign and malignant pleural effusions is important in determining the appropriate therapy. Pleural fluid cytology remains the gold standard for diagnosis of malignant and benign pleural effusions, but chest computed tomography (CT) scan has been reported to have high sensitivity and specificity. The aim of the study was to determine the differences in the characteristics of the CT scan finding of malignant pleural effusions due to pleural metastases of breast cancer with exudative benign pleural effusions.

Material and Method. This comparative analytic study with cross-sectional approach used secondary data on the characteristics of chest CT scans with pleural fluid cytology data, which were divided into malignant and benign groups. The characteristics of the chest CT scan finding that were assessed were the density of pleural effusions, the size of the pleural effusion, the location of the pleural effusions, pleural nodules, irregular pleural thickening (focal, circumferential or mediastinal).

Results. There were 50 patients with pleural effusion consisting of 25 patients with malignant pleural effusion due to breast cancer pleural metastases and 25 patients with exudative benign pleural effusion due to pulmonary tuberculosis, pneumonia, SLE and pulmonary embolism. Comparative analysis showed significant values on the characteristics of pleural effusion density ($p = 0.009$), pleural nodules ($p = 0.00$), focal irregular pleural thickening ($p = 0.005$) and mediastinal pleural thickening ($p = 0.002$) while insignificant values were on the characteristics estimated pleural effusion volume ($p = 0.312$), location of pleural effusion ($p = 0.390$) and circumferential pleural thickening ($p = 0.247$).

Conclusion. The characteristics of the chest CT scan finding such as the density of pleural effusions, pleural nodules, focal irregular pleural thickening and thickening of the pleural mediastinum show significant differences in malignant and benign pleural effusions.

Keywords: Exudative pleural effusions, pleural metastases of breast cancer, Computed Tomography (CT) scan.