Proporsi Kepositifan Biopsi Paru Transtorakal Aspirasi Jarum Halus Dan Core Dengan Panduan Computed Tomography Scan Dalam Menegakkan Keganasan Rongga Toraks Di Rumah Sakit Persahabatan Pusat Respirasi Nasional Jakarta = Proportion Of Positivity For Fine-Needle And Core Transthoracic Lung Biopsy Computed tomography-guided in confirming thoracic Cavity Malignancies At Persahabatan Hospital National Respiratory Center

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Abstrak

Latar belakang: Kasus baru kanker paru semakin bertambah dan mulai banyak dialami usia muda. Pendekatan skrining dalam upaya deteksi dini dilanjutkan tindakan diagnostik yang cepat dan akurat memberikan penderita memeroleh kualitas hidup yang lebih baik dalam perjalanan penyakitnya. Biopsi paru transtorakal menggunakan jarum halus dan core menghasilkan akurasi berkisar 85%-90% dengan keunggulan tindakan minimal invasif. Variasi akurasi diagnostik dan belum terdapat data proporsi hasil biopsi transtorakal di RS Persahabatan, membuat kami melakukan penelitian ini. Metode: Kami melakukan pencatatan data sampel periode Januari 2021-September 2023 pada bulan Januari-Februari 2024. Data yang dicatat yaitu karakteristik pasien keganasan rongga toraks belum tegak jenis yang dilakukan tindakan biopsi jarum halus dan core transtorakal dengan panduan CT scan. Sebanyak 765 pasien dalam periode tindakan didapatkan 563 pasien yang sesuai kriteria inklusi dan eksklusi. Data kemudian dianalisis untuk menilai kepositifan biopsi jarum halus dan core transtorakal serta faktor yang memengaruhinya. Hasil: Sejumlah 563 subjek terdiri atas laki-laki 67,9% dan perempuan 32,1%. Usia paling muda 18 tahun dan paling tua 88 tahun dengan median usia 56 tahun. Subjek dengan keluhan respirasi 83,7% dan nonrespirasi 16,3%. Perokok merupakan mayoritas subjek sebesar 58,4%. Lokasi target biopsi paling banyak di paru 75,3% sedangkan mediastinum 24,7%. Nilai HU kami kelompokkan menjadi 30 sebanyak 91,3% dan < 30 sebanyak 8,7%. Panjang minimal kedalaman tusuk 0,7 cm dan maksimal 11,21 cm dengan median 4,2 cm. Posisi saat tindakan biopsi yaitu terlentang 67,5%, tengkurap 24,5% dan lateral dekubitus 8%. Proporsi kepositifan biopsi jarum halus 80,8% sementara biopsi core 77,6%. Selanjutnya karakteristik tersebut kami lakukan analisis bivariat didapatkan nilai HU memengaruhi kepositifan biopsi jarum halus ($p < 0,05$). Kesimpulan: Proporsi biopsi jarum halus dan core transtorakal di RS Persahabatan sangat baik. Nilai HU memengaruhi kepositifan biopsi TTNA namun, tidak pada biopsi core. Kedalaman tusuk dan posisi bukan faktor yang memengaruhi kepositifan biopsi TTNA dan core.

.....Background: New cases of lung cancer are increasing and are starting to occur at a young age. A screening approach in an effort for early detection followed by rapid and accurate diagnosis provides patients with a better quality of life throughout their disease. Transthoracic lung biopsy using a fine needle and core produces an accuracy of around 85%-90% with the advantage of being minimally invasive. Variations in diagnostic accuracy and no database availability yet on the proportion of transthoracic biopsy results at Persahabatan Hospital prompted us to conduct this research. Methods: We recorded data from January 2021-September 2023 in January-February 2024. The data recorded were the characteristics of patients with unconfirmed type thoracic cavity malignancies who underwent fine needle and transthoracic

core biopsies CT scan guided. A total of 765 patients during the action period 563 patients met the inclusion and exclusion criteria. The data is then processed to assess the positivity of transthoracic fine needle and core biopsies and the factors that influence it. Result: A total of 563 subjects consisted of 67.9% men and 32.1% women. The youngest age is 18 years and the oldest is 88 years with a median age of 56 years. Subjects with respiratory complaints were 83.7% and non-respiratory 16.3%. Smokers constituted the majority of our subjects at 58.4%. The most common biopsy target locations were the lungs, 75.3%, while the mediastinum was 24.7%. Hounsfield units are divided into 30 as many as 91.3% and < 30 as many as 8.7%. The minimum length of the puncture depth is 0.7 cm and the maximum is 11.21 cm with 4.2 cm as the median. The position during the biopsy was supination 67.5%, prone 24.5%, and lateral decubitus 8%. The positive proportion of fine needle biopsy was 80.8% while core biopsy was 77.6%. We conducted a bivariate analysis of these characteristics and found that the HU value influenced the positivity of fine needle biopsy ($p < 0.05$). Conclusion: The proportion of fine needle and core transthoracic lung biopsies at Persahabatan Hospital is decent. The HU value influences the positivity of TTNA biopsy but not core biopsy. Puncture depth and position were not a factor influencing the positivity of TTNA and core biopsies.