

HUBUNGAN KARDIOMEGALI DENGAN KEJADIAN PNEUMONIA COVID-19 DERAJAT BERAT BERDASARKAN FOTO THORAX SESUAI BRIXIA SCORE

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INTISARI

Latar Belakang : Komorbiditas yang paling sering teridentifikasi pada pasien covid-19 adalah hipertensi (15,8%), kondisi kardiovaskular dan serebrovaskular (11,7%) dan diabetes (9,4%). Pasien penyakit kardiovaskuler mempunyai risiko lebih tinggi terinfeksi covid-19 sehingga menghasilkan outcome klinis yang lebih buruk.

Tujuan : Tujuan penelitian adalah untuk mengetahui apakah terdapat hubungan antara kardiomegali dengan keparahan pneumonia covid-19 derajat berat berdasarkan foto thorax sesuai Brixia score.

Metode : Penelitian ini menggunakan desain penelitian cross-sectional, pengambilan sampel dengan data sekunder berupa foto thorax di RSUP Dr. Sardjito Yogyakarta pada periode Januari 2021 hingga Desember 2022. Sampel penelitian diambil dengan menggunakan metode *consecutive nonrandom sampling*. Terdapat hasil foto thorax sebanyak 70 subjek yang memenuhi kriteria inklusi dan eksklusi kemudian dilakukan analisis. Data diambil dari PACS dan SIMETRIS.

Hasil : Uji Chi-square menghasilkan nilai OR = 4,792 (95%CI : 1,741-13,188) artinya bahwa pasien dengan kardiomegali memiliki kemungkinan terjadi pneumonia covid-19 derajat berat berdasarkan Brixia score sebesar 4,792 kali lebih banyak dibandingkan dengan pasien yang tidak memiliki kardiomegali. Sedangkan nilai $p = 0,002$ yang berarti signifikan secara statistik.

Kesimpulan : Terdapat hubungan positif antara kardiomegali dengan pneumonia covid-19 derajat berat berdasarkan Brixia score dengan nilai $p = 0,002$, nilai OR = 4,792 dan nilai CI antara 1,741 – 13,188.

Kata Kunci: Skor Brixia, Foto thorax, Covid-19

THE RELATIONSHIP OF CARDIOMEGALY AND THE INCIDENT OF SEVERE DEGREES OF COVID-19 PNEUMONIA BASED ON THORAX PHOTOS ACCORDING TO BRIXIA SCORE

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ABSTRACT

Background: The most frequently identified comorbidities in Covid-19 patients are hypertension (15.8%), cardiovascular and cerebrovascular conditions (11.7%) and diabetes (9.4%). Patients with cardiovascular disease have a higher risk of being infected with Covid-19, resulting in worse clinical outcomes.

Objective: The aim of the research is to determine whether there is a relationship between cardiomegaly and the severity of severe Covid-19 pneumonia based on chest x-rays according to the Brixia score.

Method: This study used a cross-sectional research design, sampling with secondary data in the form of chest photos at RSUP Dr. Sardjito Yogyakarta in the period January 2021 to December 2022. The research sample was taken using the consecutive nonrandom sampling method. There were thorax photos of 70 subjects who met the inclusion and exclusion criteria and then analyzed. Data taken from PACS and SIMETRIS.

Results: The Chi-square test produced an OR = 4.792 (95%CI: 1.741-13.188) meaning that patients with cardiomegaly had a 4.792 times greater chance of developing severe Covid-19 pneumonia based on the Brixia score compared to patients who did not have cardiomegaly. Meanwhile, the p value = 0.002, which means it is statistically significant.

Conclusion: There is a positive relationship between cardiomegaly and severe Covid-19 pneumonia based on the Brixia score with p value = 0.002, OR value = 4.792 and CI value between 1.741 – 13.188.

Keywords: Brixia score, chest photo, Covid-19