

INTISARI

PERBEDAAN SKORING PNEUMONIA ANTARA PASIEN PNEUMONIA DENGAN MIKROANGIOPATI DIABETES DIBANDINGKAN NON MIKROANGIOPATI DIABETES

Benny Setiyadi¹, Sumardi², M Robikhul Ikhsan³

¹PPDS, Departemen Ilmu Penyakit Dalam, FKMK UGM /RSUP dr. Sardjito, ²Sub Bagian Pulmonologi, Departemen Ilmu Penyakit Dalam, FKMK UGM /RSUP dr. Sardjito, ³Sub Bagian Endokrin Metabolik Diabetes, Departemen Ilmu Penyakit Dalam, FKMK UGM /RSUP dr. Sardjito

Latar Belakang: Mikroangiopati merupakan komplikasi sistemik diabetes melitus tipe 2 terjadi di berbagai organ. Mikroangiopati yang terjadi di paru akan menurunkan fungsi dan imunitas. Kondisi ini akan meningkatkan risiko dan kerentanan terhadap infeksi pneumonia. Sehingga penderita diabetes melitus tipe 2 dengan komplikasi mikroangiopati yang terinfeksi pneumonia lebih berisiko menjadi infeksi berat dan dibuktikan dengan skoring pneumonia yang tinggi.

Tujuan Penelitian: Mengetahui pengaruh mikroangiopati diabetes pada peningkatan skoring pneumonia pada penderita pneumonia dan diabetes melitus tipe 2.

Metode Penelitian: Penelitian ini menggunakan metode cross sectional restrospektif, berlangsung selama 1 Januari 2021 - 30 Juni 2021. Pada pasien rawat inap di RSUP dr. Sardjito Yogyakarta antara periode Januari 2015 sampai Desember 2019. Subjek penelitian yaitu data rekam medis dengan diagnosis pneumonia komunitas dan DM tipe 2 yang memenuhi kriteria inklusi serta eksklusi. Dilakukan penilaian mikroangiopati dan atau tanpa mikroangiopati selanjutnya dilihat nilai skor CURB-65 dan PSI. Dilakukan analisis bivariat dengan uji chi square dan dilanjutkan analisis multivariat uji regresi logistik untuk variabel perancu potensial.

Hasil Penelitian: Telah diperoleh 190 sampel penelitian. Sebanyak 78,4% mikroangiopati dan 21,6% non mikroangiopati. Pasien yang memiliki mikroangiopati mengalami peningkatan skor Curb-65 ≥ 4 85,4% dan skor PSI ≥ 4 85,4%. Hasil analisis bivariat mikroangiopati DM memiliki hubungan yang signifikan dengan peningkatan skor Curb-65 dengan OR = 2,501 [95% CI 1,224-5,109, (P=0,011)] dan peningkatan skor PSI dengan OR = 4,505 [95% CI 2,140-9,484, (P<0,001)]. Hasil uji regresi logistik setelah menyesuaikan terhadap pengaruh variabel perancu potensial, mikroangiopati DM masih memiliki hubungan yang signifikan dengan peningkatan skor PSI dengan OR 2,816 [95% CI 1,278-6,204 (P=0,01)].

Kesimpulan: Mikroangiopati DM memiliki pengaruh yang signifikan terhadap peningkatan skoring pneumonia pada penderita pneumonia dan diabetes melitus tipe 2.

Kata kunci: Pneumonia, Diabetes melitus tipe 2, Mikroangiopati DM, Skor Pneumonia

ABSTRACT

THE DIFFERENCES IN PNEUMONIA SCORES BETWEEN PNEUMONIA PATIENT WITH DIABETIC MICROANGIOPATHY COMPARED TO NON MICROANGIOPATHY

Benny Setiyadi¹, Sumardi², M Robikhul Ikhsan³

¹Resident of Internal Medicine, ² Division of Pulmonology Department of Internal Medicine,

³Division of Diabetes, Endocrinology, & Metabolic Diseases Department of Internal Medicine Faculty
of Medicine Public Health and Nursing Gadjah Mada University/Dr.Sardjito Hospital Yogyakarta

Background: Microangiopathy is a systemic complication of type 2 diabetes. Microangiopathy in the lungs will reduce function and immune system. This condition will increase the risk and susceptibility to pneumonia infection. If type 2 DM patients with microangiopathy infected pneumonia are more at risk of developing severe infections with high pneumonia scores.

Objective: To determine the effect of diabetic microangiopathy on increasing pneumonia scores in patients with pneumonia and type 2 diabetes mellitus.

Methods: This study used a cross sectional method, taking place from June 2021 to August 2021 at dr. Sardjito Hospital Yogyakarta. The subjects of this study were taken from medical records of patients suffering from community acquired pneumonia and type 2 DM from January 2015 to December 2019 and met the inclusion and exclusion criteria. An assessment of microangiopathy and or without microangiopathy was carried out and then seen the CURB-65 dan PSI score. Bivariate analysis was performed with chi square test and followed by multivariate analysis with logistic regression test for potential confounding variables.

Research Results: 190 research samples have been obtained. A total of 78.4% diabetic microangiopathy and 21.6% non-microangiopathy. 85,4% of diabetic microangiopathy patients had CURB-65 \geq 4 dan PSI score \geq 4. The results of the bivariate analysis of DM microangiopathy had a significant relationship with an increase in Curb-65 score with OR = 2.501 [95% CI 1.224-5.109, (P = 0.011)] and an increase in PSI score with OR = 4.505 [95% CI 2.140-9.484, (P<0.001)]. The results of the logistic regression test after adjusting for the effect of potential confounding variables, DM microangiopathy still had a significant relationship with an increase in PSI score with an OR of 2.816 [95% CI 1.278-6.204 (P=0.01)].

Conclusion: Diabetic microangiopathy has a significant effect on increasing pneumonia scores in patients with pneumonia and type 2 diabetes mellitus.

Keywords: Pneumonia, Type 2 DM, Diabetic microangiopathy, Pneumonia scores.