

INTISARI

HUBUNGAN MIKROANGIOPATI DM DENGAN MULTI DRUG RESISTANT ORGANISM (MDRO) PADA PASIEN PNEUMONIA DENGAN KOMORBID DM RAWAT INAP DI RUMAH SAKIT UMUM PUSAT DR. SARDJITO

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Latar Belakang: Risiko terjadinya pneumonia akan meningkat terkait adanya komorbid Diabetes Melitus (DM). Komplikasi klasik dari penyakit DM telah dikaitkan dengan berkurangnya respons sel T, fungsi neutrofil, dan gangguan imunitas humoral, akibatnya Infeksi saluran pernapasan merupakan penyakit yang banyak terjadi pada orang-orang dengan DM. Hampir semua pasien DM memiliki resistensi antimikroba yang lebih tinggi daripada kelompok tanpa DM. Komplikasi mikroangiopati DM berpotensi menjadi faktor risiko terjadinya MDRO.

Tujuan Penelitian: Mengetahui hubungan mikroangiopati DM dengan *Multi Drug Resistant Organism* (MDRO) pada pasien pneumonia dengan komorbid DM rawat inap di Rumah Sakit Umum Pusat dr. Sardjito.

Metode Penelitian: Penelitian ini adalah penelitian analitik observasional dengan pendekatan *Cross Sectional* Retrospektif, menggunakan data dari rekam medis pasien RSUP dr. Sardjito Januari 2015-Januari 2020. Jumlah subyek penelitian sebanyak 71 sampel yang memenuhi kriteria inklusi. Analisis bivariat antara mikroangiopati DM dan MDRO pneumonia dianalisa menggunakan *chi-square test*.

Hasil Penelitian: Subyek penelitian pneumonia dengan komorbid mikroangiopati DM yang mengalami MDRO sebanyak 54,9% dari keseluruhan subyek penelitian, subyek pneumonia yang tidak mikroangiopati mengalami MDRO sebanyak 21,1%, ($p=0,297$) OR 1,82 (95% CI: 0,58-5,66).

Kesimpulan: Tidak terdapat hubungan mikroangiopati DM dengan *Multi Drug Resistant Organism* (MDRO) pada pasien pneumonia dengan komorbid DM rawat inap di Rumah Sakit Umum Pusat dr. Sardjito.

Kata Kunci: *Mikroangiopati DM, Multi Drug Resistant Organism, Pneumonia*

ABSTRACT

THE RELATIONSHIP BETWEEN DM MICROANGIOPATHY AND MULTI DRUG RESISTANT ORGANISMS (MDRO) IN PNEUMONIA PATIENTS WITH COMORBID DM INPATIENTS AT THE CENTRAL GENERAL HOSPITAL DR. SARDJITO

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Backgrounds: The risk of pneumonia would increase due to the comorbid Diabetes Mellitus (DM). Classic complications of DM has been associated with reduced T cell response, neutrophil function, and impaired humoral immunity, as a result Respiratory tract infection was a common disease in people with DM. Almost all DM patients has higher antimicrobial resistance than the non-DM group. Complications of DM microangiopathy has the potential to be a risk factor for MDRO.

Objective: The aim of this study was known the relationship between DM microangiopathy and Multi Drug Resistant Organisms (MDRO) in pneumonia patients with comorbid DM inpatients at the Central General Hospital dr. Sardjito.

Methods: This research was an observational analytic study with a cross sectional retrospective approach, using data from the medical records of patients at the Central General Hospital dr. Sardjito From January 2015 to January 2020. The number of research subjects was 71 samples that met the inclusion criteria. Bivariate analysis between microangiopathy DM and MDRO pneumonia was analyzed using the chi-square test.

Results: Study subjects pneumonia with comorbid DM microangiopathy who experienced MDRO was 54.9% of the total study subjects, pneumonia subjects without microangiopathy experienced MDRO was 21.1%, ($p = 0.297$) OR 1.82 (95% CI: 0.58 -5.66).

Conclusion: There was no relationship between DM microangiopathy and Multi Drug Resistant Organisms (MDRO) in pneumonia patients with comorbid DM inpatients at the Central General Hospital dr. Sardjito.

Keywords: DM Microangiopathy, Multi Drug Resistant Organism, Pneumonia