Hipoalbuminemia sebagai prediktor kejadian acute respiratory distress syndrome dalam 14 hari perawatan sejak diagnosis pneumonia = Hypoalbuminemia as predictor of acute respiratory distress syndrome in 14 days after pneumonia diagnosis

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Abstrak

Latar Belakang: Acute Respiratory Distress Syndrome (ARDS) merupakan salah satu komplikasi progresivitas pneumonia, dengan risiko mortalitas dan kebutuhan ventilasi mekanik yang sangat tinggi. Identifikasi risiko tinggi kejadian ARDS sangat penting untuk meningkatkan kewaspadaan tenaga medis dan upaya pencegahan yang optimal.
Tujuan: Mengetahui insidens ARDS pada pasien pneumonia dan mengetahui apakah hipoalbuminemia dapat memprediksi kejadian ARDS dalam 14 hari perawatan.
Metode: Studi kohort prospektif pasien pneumonia yang dirawat ruang rawat inap RSPUN dr. Cipto Mangunkusumo dalam periode 1 Agustus-31 Desember 2015. Hipoalbuminemia didefinisikan sebagai kadar albumin admisi < 2,5 g/dL. Kejadian ARDS dinilai berdasarkan pemenuhan kriteria Berlin dalam 14 hari perawatan.
Hasil: Subjek pada penelitian ini sebanyak 120 pasien. Insidens kumulatif ARDS sebesar 17,5% (IK95% 10,7%-24,3%). Analisis bivariat menunjukkan hipoalbuminemia dapat memprediksi peningkatan risiko ARDS dalam 14 hari perawatan (RR 3,455; IK 95% 1,658-7,200). Terdapat hubungan bermakna antara sepsis saat admisi dan keseimbangan cairan dengan kejadian ARDS dalam 14 hari perawatan. Analisis multivariat menunjukkan RR hipoalbuminemia setelah penyesuaian adalah 3,274 (IK 95% 1,495-5,528), dengan variabel perancu sepsis saat admisi.
Simpulan: Insidens ARDS pasien pneumonia dalam 14 hari perawatan adalah 17,5%. Hipoalbuminemia dapat memprediksi peningkatan risiko kejadian ARDS dalam 14 hari perawatan pasien pneumonia.
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Background: Acute Respiratory Distress Syndrome (ARDS) is one of complication for pneumonia progression, it is associated with higher risk of mortality and increased need for mechanical ventilation. Identification of patients with high risk of developing ARDS is essential to increase physician alertness and ensure optimal prevention.
Purpose: To obtained information about incidence of ARDS in pneumonia diagnosed patients, and if hypoalbuminemia can predict occurrence of ARDS in 14 days after diagnosed pneumonia.
Method: Prospective cohort study in pneumonia diagnosed patients admitted in August until 31 December 2015, with 14 days of observation, all patient is being treated in medical ward unit of Cipto Mangunkusumo Hospital. Hypoalbuminemia is defined as albumin level below 2,5 g/dL and ARDS is defined by Berlin criteria.
Result: The study has enrolled 120 patient. Cumulative incidence of ARDS is 17,5% (IK95% 10,7%-24,3%). Bivariate analysis showed hypoalbuminemia could predict increased risk of ARDS in 14 days after diagnosed pneumonia (RR 3,455; IK 95% 1,658-7,200). There is significant relationship between sepsis at time of admission and mean fluid balance. Multivariate analysis shows adjusted RR 3,274 (IK 95% 1,495-

5,528), with sepsis at time of admission as a confounder.
Conclusion: Cumulative incidence of ARDS in pneumonia diagnosed patient after 14 days is 17,5%. Hypoalbuminemia could predict increased risk of ARDS in 14 days of treatment in pneumonia diagnosed patients.