

PREDIKTOR MORTALITAS ANAK IMUNOKOMPROMAIS DENGAN VARISELA

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INTISARI

Latar belakang. Varisela pada anak tanpa penyulit atau imunokompeten gejalanya ringan, dapat sembuh dengan sendirinya dan jarang menimbulkan komplikasi maupun kematian, namun pada anak dengan imunokompromais, mortalitas meningkat sampai 80 kali lipat.

Tujuan. Mengetahui prediktor mortalitas anak imunokompromais dengan varisela di RSUP Dr. Sardjito, Yogyakarta.

Metode. Penelitian observasional analitik dengan desain kohort retrospektif pada periode Januari 2017 – Desember 2022. Subjek penelitian adalah usia 1 bulan-18 tahun, rawat inap di RSUP Dr. Sardjito Yogyakarta, imunokompromais dan terdiagnosis varisela secara klinis. Perbandingan data kategorik dianalisis dengan uji multivariat regresi logistik.

Hasil. Jumlah pasien dengan varisela dan di rawat inap yaitu 74 anak dan 63 (85%) anak di antaranya adalah imunokompromais. Tiga puluh enam (57%) pasien dengan penyakit dasar keganasan darah, 11 (18%) pasien menderita kanker tumor padat, dan 16 (25%) anak dengan kondisi imunokompromias yang bukan keganasan. Rerata usia anak 8,4 (\pm 4,65) tahun dengan rasio laki – laki terhadap perempuan 1,3:1. Median onset ruam kulit pertama kali muncul sampai pemberian asiklovir intravena yaitu 2 (0-8) hari. Tidak ada pasien yang pernah mendapatkan vaksinasi varisela. Dua puluh (32%) anak mengalami satu atau lebih komplikasi varisela, terbanyak adalah pneumonia (12,7%). Enam (9,5%) anak dengan luaran meninggal dunia karena varisela. Laki-laki, anak yang mendapat asiklovir intravena >3 hari setelah ruam kulit muncul pertama, mengalami \geq 2 komplikasi, dan rasio netrofil/limfosit >3,3 memiliki risiko kematian lebih tinggi. Analisis multivariat menunjukkan terjadinya \geq 2 komplikasi varisela berpengaruh terhadap kematian (OR 61,67 (IK95% 5,33-713,38), p 0,001).

Kesimpulan. Kondisi terjadinya dua atau lebih komplikasi merupakan prediktor mortalitas anak imunokompromais dengan varisela.

PREDICTORS OF MORTALITY IN IMMUNOCOMPROMISED CHILDREN WITH VARICELLA

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ABSTRACT

Background. Engaging in vaccine preventable disease is the core strategy to achieve Universal Health Coverage, including varicella. In immunocompetent children, varicella is generally a benign, self-limiting disease that rarely causes complications and death, whereas in immunocompromised children, morbidity and mortality due to varicella are up to 80 times higher.

Objective. To analyze the predictors of varicella-related death in immunocompromised children in Dr Sardjito General Hospital.

Method. We recorded immunocompromised pediatric patients (1 month-18 years old) diagnosed with varicella retrospectively between January 2017 and December 2022 at Dr. Sardjito General Hospital. Factors associated with mortality were tested using multivariate logistic regression.

Result. A total of 74 children with varicella were hospitalized during the study period. Of these patients, 63 were immunocompromised (85%). Thirty-six (57%) patients had an underlying disease of blood malignancy; 11 (18%) patients had solid organ tumors; and 16 (25%) patients had non-malignancy diseases. The mean age was 8.4 (± 4.65) years old, with a male-to-female ratio of 1.3 : 1. The median onset of the first skin rash occurred to the administration of intravenous acyclovir was 2 (0–8) days. None of the patients had received the varicella vaccination. Twenty patients (32%) developed one or more complications, whereas pneumonia accounted for the highest case (12.7%). We recorded varicella-related deaths in 6 (9.5%) patients. Male, children who received intravenous acyclovir >3 days after skin rash occurred, had ≥ 2 varicella complications, and with neutrophil/lymphocyte ratio >3.3 had a higher risk of death. Multiple varicella complications was shown to be associated with mortality (OR 61.67 (95%CI 5.33-713.38), p 0.001).

Conclusion. The occurrence of multiple complications of varicella was a predictor of varicella-related death in immunocompromised children