Nilai Diagnostik CT Value dengan Metode RT-PCR terhadap Infeksi Kandidiasis INVASIF = Diagnostic Value Of CT Value by RT-PCR Method for Invasive Candidiasis Infection

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Abstrak

Pasien kritis di ICU rentan terkena kandidiasis invasif dengan insiden 10–15%. Kultur darah merupakan diagnostik baku emas memiliki keterbatasan membutuhkan waktu 4-5 hari keluar hasil, sensitivitasnya hanya 50%. RT-PCR memiliki keunggulan dapat langsung menetukan jenis candida, relatif cepat, dan memiliki sensitifitas tinggi. Studi ini bertujuan menganalisis nilai diagnostik dari titik potong CT Value RT-PCR terhadap hasil kultur darah dalam menegakkan diagnosis kandidiasis invasif. Penelitian uji diagnostik pada 67 pasien diduga Kandidiasis Invasif di ICU. Kriteria inklusi pasien dengan skor candida 3. Spesimen sampel darah diambil pada tempat dan waktu yang sama kemudian dilakukan kultur darah dalam media Saboroud Agar dan pemeriksaan RT-PCR. Primer RT-PCR dapat deteksi C.albicans, C.parapsilosis, C.tropikalis, dan C.Glabrata. Pengambilan sampel dilakukan secara consecutive sampling. Dari 67 sampel penelitian didapatkan sampel yang positif RT-PCR 6 sampel, positif kultur darah 6 sampel, dan sampel yang positif RT-PCR dan kultur darah ada 3 sampel. Spesies candida yang didapatkan pada RT-PCR semua sampel adalah C.parapsilosis. Nilai titik potong CT Value yang didapat adalah 36.185 dengan nilai area AUC 66,7%. Nilai diagnostik CT-Value dengan metode RT-PCR memiliki nilai diagnostik yang tidak berbeda terhadap hasil kultur darah dalam mendiagnosis kandidiasis invasif, namun dengan tingkat kepercayaan yang rendah. Nilai titik potong CT-Value pemeriksaan RT-PCR adalah 36.185. Nilai ini memiliki sensitifitas 33.33%, spesifisitas 96,87%, PPV 33.33%, NPV 96,87%.

.....Critical patients in the ICU are susceptible to invasive candidiasis with an incidence of 10–15%. Blood culture is a gold standard diagnostic that has limitations that it takes 4-5 days to get results, the sensitivity is only 50%. RT-PCR has the advantage of being able to directly determine the type of candida, relatively fast, and has high sensitivity. This study aims to analyze the diagnostic value of the CT Value RT-PCR cut-off point on the results of blood culture in establishing the diagnosis of invasive candidiasis. Diagnostic test study on 67 patients suspected of Invasive Candidiasis in the ICU. Inclusion criteria for patients with candida scores 3. Blood sample specimens were taken at the same place and time, then blood culture was carried out in Saboroud Agar media and RT-PCR examination. RT-PCR primers can detect C. albicans, C. parapsilosis, C. tropicals, and C. Glabrata. Sampling was carried out by consecutive sampling. Of the 67 research samples, 6 samples were positive for RT-PCR, 6 samples were positive for blood culture, and 3 samples were positive for RT-PCR and blood culture. The candida species obtained in RT-PCR of all samples was C. parapsilosis. The cut-off point value of the CT Value obtained was 36,185 with an AUC area value of 66.7%. The diagnostic value of CT-Value with the RT-PCR method has a diagnostic value that is not different from the results of blood culture in diagnosing invasive candidiasis, but with a low level of confidence. The CT-Value cut-off point value of the RT-PCR examination is 36.185. This value has a sensitivity of 33.33%, specificity of 96.87%, PPV of 33.33%, NPV of 96.87%.