Peranan biakan usap telinga dalam diagnosis sepsis awitan dini pada bayi baru lahir = The role of ear swabs culture in the diagnosis early onset sepsis of the newborn

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Abstrak

[ABSTRAK
Latar belakang. Sepsis neonatorum awitan dini (SNAD) adalah sindrom klinis akibat respon sistemik terhadap infeksi pada awal kehidupan. Diagnosis SNAD seringkali sulit karena gejala klinisnya tidak spesifik.
Tujuan. Mengetahui sensitivitas dan spesifisitas biakan usap telinga dalam diagnosis SNAD.
Metode. Subjek penelitian adalah neonatus yang lahir di RSCM Jakarta dan RSU Tangerang Selatan dengan diagnosis SNAD. Dilakukan pengambilan biakan dari usapan telinga dan darah bayi.
Hasil. Diantara 50 subjek, terdapat 2 neonatus dengan biakan darah positif, dan 32 neonatus dengan biakan usap telinga positif. Hanya 1 subjek yang memiliki kesesuaian jenis kuman yang tumbuh dari biakan darah dan biakan usap telinga. Bakteri yang tumbuh pada biakan usap telinga sebagian besar adalah Gram postif (62%). Biakan usap telinga mempunyai sensitivitas 64,7%, spesifisitas 36,4%, nilai duga positif 34,3%, nilai duga negatif 66,6%, rasio kemungkinan positif 1,02, rasio kemungkinan negatif 0,97, dan, akurasi 46% untuk mendeteksi SNAD.
Simpulan. Ditemukan hasil biakan darah positif pada 2 subjek. Biakan usap telinga memiliki sensitivitas 64,7%, spesifisitas 36,4%, nilai duga positif 34,3%, nilai duga negatif 66,6%, rasio kemungkinan positif 1,02, rasio kemungkinan negatif 0,97, dan akurasi 46% untuk mendeteksi SNAD.
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ABSTRACT
Background. Early-onset neonatal sepsis (EOS) is a clinical syndrome due to systemic response to infection in early life. EOS is often difficult to diagnosed because the clinical symptoms are not specific.
Objective. The study aim to determine sensitivity and specificity of ear swabs culture in the diagnosis of EOS.
Methods. Neonates born in the CMH Jakarta and Tangerang Selatan Hospital who developed sepsis were studied. Swabs were collected for culture from baby’s ear. Bacterias isolated from ear swabs cultured were correlated with those from blood culture.
Results. Among 50 neonates studied, 2 neonates had positive blood cultured and 32 neonates had positive ear swabs cultured. Only one subject had suitability types of bacterias that grew from blood and ear swabs. Bacteria grew from ear

swab cultured were predominantly Gram-positive (62%). Ear swabs cultured had sensitivity 64.7%, specificity 36.4%, positive predictive value (PPV) 34.3%, negative predictive value (NPV) 66.6%, positive likelihood ratio (PLR) 1.02, negative likelihood ratio (NLR) 0.97, and accuracy 46% to detect EOS.
Conclusions. This study showed positive blood culture results were found in two subjects. Ear swabs cultured had a sensitivity 64.7%, specificity 36.4%, PPV 34.3%, NPV 66.6%, PLR 1.02, NLR 0.97, and accuracy 46% to detect EOS, Background. Early-onset neonatal sepsis (EOS) is a clinical syndrome due to
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