

UJI DIAGNOSTIK SKOR KLINIS OOSTENBRINK PADA ANAK DENGAN MENINGITIS AKUT

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Abstrak

Latar belakang. Meningitis akut merupakan infeksi susunan saraf pusat yang disebabkan bakteri atau virus. Meningitis bakterial dan meningitis virus sulit dibedakan pada awal perjalanan penyakit bila belum dilakukan lumbal pungsi. Beberapa skor yang dapat memperkirakan meningitis bakterial yaitu Lindquist, Spanos, Hoen, Freedman, Nigrovic, Bonsu yang memerlukan lumbal pungsi. Skor Oostenbrink satu-satunya yang menilai risiko meningitis bakterial sebelum lumbal pungsi.

Tujuan. Mengetahui sensitivitas, spesifisitas, nilai duga positif (NDP) dan nilai duga negatif (NDN) dari skor klinis Oostenbrink pada meningitis bakterial anak.

Metode. Penelitian ini merupakan uji diagnostik yang dilakukan pada pasien usia 1 bulan sampai 15 tahun yang dicurigai meningitis akut berdasarkan kriteria WHO. Diagnosis baku emas meningitis bakterial ditegakkan berdasarkan hasil kultur, pewarnaan Gram, analisis CSS (cairan serebrospinalis) serta kultur darah ditambah pleiositosis. Skor Oostenbrink ditetapkan berdasarkan lama keluhan utama, muntah, tanda rangsangan meningeal, sianosis, petekie, gangguan kesadaran, dan pemeriksaan CRP serum. Dilakukan uji sensitivitas skor Oostenbrink terhadap meningitis bakterial sesuai kriteria baku emas. Penelitian dilakukan bulan Oktober 2015 sampai Mei 2016.

Hasil. Subjek penelitian sebanyak 45 pasien, diantaranya 16 (35%) pasien adalah meningitis bakterial. Pasien meningitis bakterial lebih banyak laki-laki yaitu 62,5%, kelompok usia terbanyak adalah 1-12 bulan (50%). Bakteri utama yang tumbuh pada kultur CSS adalah *Klebsiella spp*, *S. aureus*. Sensitivitas skor klinis Oostenbrink adalah 93,7%, spesifisitas 58,6%, NDP 55,5%, NDN 94,4%.

Kesimpulan. Skor klinis Oostenbrink mempunyai sensitivitas dan NDN tinggi namun spesifisitas dan NDP rendah sehingga diperlukan pemeriksaan lain untuk memastikan meningitis bakterial lebih awal.

Kata kunci. Uji diagnostik, skor klinis Oostenbrink, meningitis bakterial, anak.

OOSTENBRINK CLINICAL RULES AS A DIAGNOSTIC TEST FOR ACUTE MENINGITIS IN CHILDREN

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Abstract

Background. Acute meningitis is central nervous system infection that's caused by bacterial or virus. Bacterial meningitis and virus meningitis were difficult to distinguished in initial disease before performing lumbal puncture. Several scores could be estimate bacterial meningitis such as Lindquist, Spanos, Hoen, Freedman, Nigrovic, Bonsu that required lumbal puncture. The only one Oostenbrink score predicted bacterial meningitis risk before lumbal puncture.

Objective. Determine the sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of Oostenbrink rule in children bacterial meningitis.

Method. This study is diagnostic test toward patient one month old – 15 years old who suspected acute meningitis in according WHO criteria. Gold standar diagnostic of bacterial meningitis establish in accordance culture, Gram stain, analysis of CSF and blood culture with pleiocytosis. Oostenbrink score is determined by duration of main problem, vomiting, meningeal irritation, disturbed consciousness, cyanotic, petecchiae and serum C-reactive protein level. Performed sensitivity test of Oostenbrink score toward bacterial meningitis according to gold standar criteria. This study is conducted in between October 2015 to Mei 2016.

Result. Subject of the study were 45 patients, of whom 16 (35%) had bacterial meningitis. Male is 62.5%, most age group was 1-12 months (50%). The main bacteria that grow on the CSF culture results is *Klebsiella spp* and *S. aureus*. Sensitivity Oostenbrink clinical score was 93.7%, specificity of 58.6%, NPV of 55.5% and PPV of 94.4%.

Conclusion. Oostenbrink clinical scores have a high sensitivity and high NPV, but the specificity and the PPV are low, so that it is required advance examination to certain bacterial meningitis earlier.

Key words. diagnostic test, Oostenbrink clinical score, bacterial meningitis, children