Uji diagnostik Toronto Clinical Scoring System terhadap diagnosis neuropati perifer terinduksi kemoterapi = Diagnostic test study of The Toronto clinical scoring system for the diagnosis of chemotherapy induced peripheral neuropathy

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Abstrak

[Latar belakang: Neuropati perifer terinduksi kemoterapi (NPTK) merupakan efek samping kemoterapi neurotoksik yang menurunkan kualitas hidup penderita dan menghalangi pemberian kemoterapi yang optimal. Suatu alat skrining dengan tingkat akurasi mendekati alat elektroneurografi (ENG) dibutuhkan untuk mendeteksi NPTK secara dini. Skor Toronto clinical scoring system (TCSS) merupakan alat skrining sederhana dan terbukti unggul untuk pemeriksaan neuropati pada diabetes melitus (DM). Kesamaan gambaran klinis antara neuropati DM dengan NPTK dapat menjadikan TCSS sebagai alat skrining untuk NPTK.
Tujuan: Mencari nilai ROC, senstivitas dan spesifisitas TCSS dibandingkan dengan standar baku pemeriksaan ENG
Metode penelitian: Penelitian berupa uji diagnostik skor TCSS pada penderita keganasan yang mendapat kemoterapi cisplatin di poli hematoonkologi dan ruang perawatan kemoterapi RS Ciptomangunkusumo. Pemeriksaan ENG dan skor TCSS dilakukan pada setiap subjek. Hasil dianalisa untuk mendapatkan kurva ROC, sensitivitas dan spesifisitas.
Hasil: Dari 77 subjek, terdapat 66 yang dapat dianalisa. Diagnosis polineuropati dengan menggunakan ENG sebanyak 34 (51,5%), begitu juga dengan menggunakan TCSS (51,5%). Komponen abnormal TCSS terbanyak adalah komponen pemeriksaan refleks tendon (78,8%). Dari analisa uji diagnostik didapatkan nilai AUC 75,4%, sensitivitas 79,4%, spesifisitas 59,4%, nilai prediksi positif 67,5% dan nilai prediksi negatif 73,1%, dengan titik potong optimal 5.
Kesimpulan: Skor TCSS memiliki nilai diagnostik yang cukup baik sebagai alat skrining pada NPTK. Skor ini juga memiliki nilai titik potong optimal yang sesuai dengan karakteristik klinis NPTK dan komponen yang dapat digunakan untuk mendeteksi gejala awal NPTK.;Background: Chemotherapy induced peripheral neuropathy (CIPN) is an adverse effect of neurotoxic chemotherapy that lower the patient’s quality of life and prevent optimal chemotherapy. Early detection by a screening tool that have a near accuracy to electroneurography (ENG) is needed. The Toronto clinical scoring system (TCSS) is a simple and superior tool for screening diabetic neuropathy. Similarity between diabetic neuropathy and CIPN’s clinical picture could make the TCSS as screening tool for CIPN.
Purpose: to discover the ROC, sensitivity and specificity of TCSS compared to

the ENG as gold standard
Methodology: the study is a diagnostic test of TCSS in cancer patients with cisplatin from Hematooncology clinic and chemotherapy ward of RSCM. ENG test and TCSS examination were done for each subject. Results were analyzed for ROC, sensitivity and specificity.
Result: out of 77 subjects, only 66 were analyzed. CIPN were diagnosed in 34 (51,5%) by ENG, and also in 34 (51,5%) by TCSS. The most abnormal component of TCSS is the tendon reflex examination (78,8%). The diagnostic analysis acquire the AUC 75,4%, 79,4% sensitivity, 59,4% specificity, positive predictive value of 67,5% and negative predictive value of 73,1%. The optimal cut off point is 5.
Conclusion: The TCSS is a passable screening tool for CIPN. It also have optimal cut-off point which resemble CIPN’s clinical characteristics and component which can be use to detect early signs., Background: Chemotherapy induced peripheral neuropathy (CIPN) is an
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