

PERBANDINGAN GANGGUAN FUNGSI LUHUR PASIEN CEDERA KEPALA ANTARA LESI CONTUSIO CEREBRI DAERAH FRONTAL DENGAN TEMPORAL MENGGUNAKAN METODE MINI MENTAL STATE EXAMINATION (MMSE)

Dasa Sariadi, M. Zafrullah Arifin

Abstrak

Contusio cerebri terjadi 20% - 30% dari kasus cedera kepala dan paling berat terjadi pada daerah *frontal* dan *temporal*. Hal ini disebabkan kedua daerah tersebut paling rentan terhadap *decelerasi* dan *accelerasi*. Lesi yang mengenai *lobus frontal* dan *temporal* dapat menyebabkan gangguan fungsi luhur. Tujuan penelitian ini adalah mengetahui tingkat keparahan gangguan fungsi luhur akibat *contusio cerebri* di daerah *frontal* dan *temporal*.

Penelitian prospektif kohort terhadap 38 pasien cedera kepala dengan lesi contusio cerebri di daerah *frontal* dan *temporal* yang di rawat di bagian Bedah Saraf RS. Dr. Hasan Sadikin periode Oktober 2009 - Februari 2010. Pemeriksaan menggunakan metode *Mini Mental State Examination (MMSE)* dilakukan setelah tingkat kesadaran pasien kompos mentis atau GCS:15.

Hasil penelitian dengan uji Mann Whitney test menunjukkan terdapat perbedaan komponen gangguan fungsi luhur meliputi orientasi, registrasi, perhatian, meningkat dan bahasa antara lesi *contusio cerebri* di daerah *frontal* dengan *temporal* dengan nilai $p \leq 0,05$. Skor MMSE dianalisa dengan *chi square test*.

Suatu lesi contusio cerebri di daerah frontal memiliki derajat gangguan fungsi luhur lebih berat di bandingkan temporal. Komponen yang paling banyak terganggu untuk lesi di frontal adalah atensi, sedangkan temporal adalah memori.

Kata kunci : *contusio cerebri, fungsi luhur, Mini Mental state Examination*

COMPRARISSON OF HIGHER CORTICAL FUNCTION IN PATIENT WITH CEREBRAL CONTUSION FROM HEAD INJURY BETWEEN FRONTAL AND TEMPORAL LOBE USING MINI MENTAL STATE EXAMINATION (MMSE)

Dasa Sariadi, M. Zafrullah Arifin

Abstract

Cerebral Contusion occurs 20 – 30% in head injury cases are usually more fatal in frontal and temporal area. This occurs because these areas are the most vulnerable to deceleration and acceleration mechanism. More fatal in head injury, the higher chances of disturbance in higher cortical functions of the brain. Lesion occurring in the frontal and temporal lobe can cause higher cortical function disturbance. By acknowledging higher cortical function disturbance in these patients, a better informed consent about the patients diagnosis and prognosis can be presented to the family and after care can be managed in neurorehabilitation centre. The goal of this research is finding higher brain dysfunctional in patient with cerebral contusion of the frontal and temporal lobe by using Mini Mental State Examination (MMSE).

The sample size, 38 patients, is calculated using estimated proportion formula and sampling is done using purposive sampling. Normality test with Shapiro Wilk Test to test variable data distribution of the higher cortical function. Whereas to compare higher cortical functions with cerebral contusion in frontal and temporal area use Mann Whitney Test. MMSE score is categorized and analyzed using Chi Square Test. Data analysis by using SPSS program for windows version 13.0 with degree of confidence 95% with $p < 0,05$.

The result show a significant difference of the component of higher cortical functions including orientation, registration, attention, memory, language between cerebral contusion of the frontal and temporal area in these patients with p value $< 0,05$. From RR value of patients with frontal lobe lesion have greater chances of dysfunction of the higher cortical function compared to patients with temporal lobe lesion.

Mini Mental State Examination (MMSE) can be used to sort higher cortical brain dysfunction in head injury patients especially in cerebral contusion so that the outcome of each disturbed component can be predicted. This information can be used for better informed consent and further neurorehabilitation care.

Keyword : cerebral contusion, high cortical function, Mini Mental State Examination