

## KORELASI ALBERTA STROKE PROGRAM EARLY CT SCORE (ASPECTS) DENGAN NATIONAL INSTITUTES OF HEALTH STROKE SCALE (NIHSS) PADA PASIEN STROKE ISKEMIK

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### INTISARI

**Latar Belakang.** Stroke merupakan penyebab utama disabilitas di seluruh dunia. Diagnosis yang tepat dapat menentukan terapi yang tepat. Pemeriksaan radiologi yang dapat dikerjakan untuk menegakkan diagnosis stroke iskemik salah satunya adalah dengan CT *scan*. Skor ASPECTS merupakan metode penilaian luas infark pada teritori MCA yang sensitif dalam memprediksi *outcome* setelah terapi.

**Tujuan.** Penelitian ini bertujuan untuk mengetahui korelasi antara ASPECTS dengan NIHSS pada pasien stroke iskemik.

**Bahan dan Metode.** Penelitian ini merupakan jenis penelitian retrospektif analitik korelatif, menggunakan analisis hipotesis dengan uji korelasi *Spearman*. Populasi target penelitian ini adalah hasil CT scan kepala tanpa kontras pada pasien stroke iskemik yang telah dinilai gejala defisit neurologis. Populasi terjangkau penelitian ini adalah hasil CT *scan* kepala tanpa kontras pasien stroke iskemik sesuai teritori MCA di instalasi Radiologi RSUP Dr. Sardjito Yogyakarta selama bulan Juli 2018 - Desember 2019.

**Hasil.** Subyek penelitian terdiri dari 50 data hasil CT *scan* kepala pasien stroke iskemik. Pada uji korelasi *Spearman* didapatkan kesimpulan bahwa terdapat korelasi yang bermakna dengan kekuatan korelasi sedang dan arah korelasi negatif antara skor ASPECT dengan skor NIHSS karena didapatkan nilai  $r$  hitung - 0,425 dan nilai  $P = 0,002$ .

**Kesimpulan.** Berdasarkan uji korelasi *Spearman*, terdapat korelasi yang signifikan antara skor ASPECTS dengan skala NIHSS pada pasien stroke iskemik dengan hubungan yang sedang dan arah hubungan negatif, yang artinya semakin tinggi skor ASPECTS maka semakin rendah skala NIHSS.

**Kata Kunci :** Stroke iskemik, CT *scan* kepala, ASPECTS, NIHSS.

## CORRELATION OF ALBERTA STROKE PROGRAM EARLY CT SCORE (ASPECTS) WITH NATIONAL INSTITUTES OF HEALTH STROKE SCALE (NIHSS) IN ISCHEMIC STROKE PATIENTS

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### ABSTRACT

**Background.** Stroke is a major cause of disability throughout the world. The right diagnosis can determine the right therapy. Radiological examination that can be done to establish the diagnosis of ischemic stroke one of which is by CT scan. ASPECTS score is a method of broad assessment of infarction in MCA territory that is sensitive in predicting outcomes after treatment.

**Objective.** This study aims to determine the correlation between ASPECTS and NIHSS in ischemic stroke patients.

**Materials and Methods.** This research is a correlative analytic retrospective study, using hypothesis analysis with the Spearman correlation test. The target population of this study was the results of head CT scans without contrast in ischemic stroke patients who had assessed neurological deficit symptoms. The affordable population of this study was the results of head CT scans without contrasting ischemic stroke patients according to MCA territory in the Radiology installation of RSUP Dr. Sardjito Yogyakarta during July 2018 - December 2019.

**Results.** The study subjects consisted of 50 data from the head CT scan of ischemic stroke patients. In the Spearman correlation test, it was concluded that there was a significant correlation with the strength of the moderate correlation and the direction of the negative correlation between the ASPECTS score and the NIHSS score because the calculated  $r$  value was  $-0.425$  and the value of  $P = 0.002$ .

**Conclusion.** Based on the Spearman correlation test, there is a significant correlation between the ASPECTS score with the NIHSS scale in ischemic stroke patients with a moderate relationship and the direction of the negative relationship, which means the higher the ASPECTS score, the lower the NIHSS scale.

**Keywords.** Ischemic stroke, head CT scan, ASPECTS, NIHSS.