FACULTY OF MEDICINE AND HEALTH SCIENCES

MUHAMMADIYAH UNIVERSITY OF MAKASSAR

Alifya Mugni Azzahra[1], Zulfikar Tahir[2], Deddy S Razak[2], Ya'kub[3]

[1]Student of Faculty of Medicine and Health Sciences Muhammadiyah University of Makassar, Class of 2022/Email: amugniazzahra@med.unismuh.ac.id, [2]Lecturer of Faculty of Medicine and Health Sciences Muhammadiyah University of Makassar, [3]Lecturer of Departement of Al-Islam Kemuhammadiyahan Faculty of Medicine and Health Sciences Muhammadiyah University of Makassar.

"CORRELATION OF CEREBRAL INFARCTION LESION LOCATION WITH THE DEGREE OF NEUROLOGIC IMPAIRMENT AND PROGNOSIS OF PATIENTS IN RSUD SINJAI 2024-2025"

ABSTRACT

Background: Ischemic stroke remains a leading cause of disability and mortality in Indonesia, with wide variations in clinical manifestations and functional outcomes. The severity of initial neurological deficits and the location of cerebral infarction lesions are considered important factors influencing patient prognosis; however, previous studies have reported inconsistent findings regarding these associations. **Objective:** This study aimed to determine the relationship between cerebral infarction lesion location and neurological severity based on the National Institutes of Health Stroke Scale (NIHSS), the relationship between lesion location and functional prognosis based on the Modified Rankin Scale (mRS), and the association between NIHSS scores and mRS outcomes in patients with ischemic stroke at RSUD Sinjai during 2024–2025. **Methods:** This observational analytic study employed a cross-sectional design. Total sampling was used to include ischemic stroke patients who met the inclusion criteria. Data were obtained from medical records, including infarct lesion location, NIHSS scores, and mRS scores. Data analysis was performed using Spearman correlation tests. **Results:** The findings showed no significant association between infarct lesion location and NIHSS or mRS scores. However, a strong and statistically significant positive correlation was observed between NIHSS scores and mRS outcomes. **Conclusion:** Initial neurological severity is significantly associated with functional prognosis in patients with ischemic stroke, whereas infarct lesion location is not. These results highlight the importance of early clinical assessment in guiding treatment strategies and rehabilitation planning for ischemic stroke patients.

Keywords: Ischemic stroke, infarct location, NIHSS, mRS, prognosis.

FAKULTAS KEDOKTERAN DAN ILMU KESEHATAN

UNIVERSITAS MUHAMMADIYAH MAKASSSAR

Alifya Mugni Azzahra[1], Zulfikar Tahir[2], Deddy S Razak[2], Ya'kub[3]

[1]Mahasiswa Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Makassar, Angkatan 2022/Email: amugniazzahra@med.unismuh.ac.id, [2]Dosen Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Makassar, [3]Dosen Departemen Al-Islam Kemuhammadiyahan Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Makassar.

" KORELASI LOKASI LESI INFARK SEREBRI DENGAN DERAJAT GANGGUAN NEUROLOGIS DAN PROGNOSIS PASIEN DI RSUD SINJAI 2024-2025"

ABSTRAK

Latar Belakang: Stroke iskemik merupakan salah satu penyebab utama disabilitas dan kematian di Indonesia, dengan manifestasi klinis dan luaran fungsional yang sangat bervariasi. Derajat keparahan neurologis awal dan lokasi lesi infark serebri diduga berperan dalam menentukan prognosis pasien, namun hasil penelitian terkait hubungan faktor-faktor tersebut masih menunjukkan temuan yang tidak konsisten. **Tujuan:** Penelitian ini bertujuan untuk mengetahui hubungan antara lokasi lesi infark serebri dengan derajat gangguan neurologis berdasarkan National Institutes of Health Stroke Scale (NIHSS), hubungan lokasi lesi infark dengan prognosis fungsional berdasarkan Modified Rankin Scale (mRS), serta hubungan antara skor NIHSS dan skor mRS pada pasien stroke iskemik di RSUD Sinjai tahun 2024– 2025. **Metode:** Penelitian ini merupakan penelitian observasional analitik dengan pendekatan potong lintang (cross sectional). Sampel penelitian diambil menggunakan teknik total sampling terhadap pasien stroke iskemik yang memenuhi kriteria inklusi. Data diperoleh dari rekam medis berupa lokasi lesi infark serebri, skor NIHSS, dan skor mRS. Analisis data dilakukan menggunakan uji korelasi Spearman. **Hasil:** Hasil penelitian menunjukkan tidak terdapat hubungan bermakna antara lokasi lesi infark dengan skor NIHSS maupun skor mRS, namun terdapat hubungan positif yang kuat dan signifikan antara skor NIHSS dan skor mRS. **Kesimpulan:** Derajat keparahan neurologis awal berhubungan dengan prognosis fungsional pasien stroke iskemik, sedangkan lokasi lesi infark tidak menunjukkan hubungan yang signifikan. Temuan ini menegaskan pentingnya penilaian klinis awal dalam perencanaan tatalaksana dan rehabilitasi pasien stroke.

Kata Kunci: Stroke iskemik, lokasi infark, NIHSS, mRS, prognosis.