

HUBUNGAN ANTARA RADIOLOGIC FEATURE, LOKASI DAN LATERALISASI MENINGIOMA PADA PEMERIKSAAN MRI KEPALA DENGAN EKSPRESI Ki-67

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INTISARI

Latar Belakang: Meningioma adalah tumor intrakranial primer yang paling umum dengan insiden 2,3 – 8,3 per 100.000 orang. Indeks Ki-67 menjadi faktor yang konsisten untuk membedakan meningioma anaplastik dan jinak. Temuan *Radiologic feature*, lokasi, lateralisasi meningioma pada pemeriksaan MRI kepala berguna dalam memprediksi Ki-67 pada pasien meningioma untuk menentukan prognosis dan terapi.

Tujuan: Penelitian ini bertujuan mengetahui hubungan antara *radiologic feature*, lokasi dan lateralisasi Meningioma pada pemeriksaan MRI kepala dengan ekspresi Ki-67.

Metode: Penelitian dengan desain *cross sectional* ini dilakukan di RSUP Dr Sardjito Yogyakarta dengan mengambil data sekunder dari pasien yang melakukan pemeriksaan MRI kepala dan patologi anatomi dengan hasil Meningioma di RS Sardjito Yogyakarta periode Januari 2019-November 2023. Subjek diambil menggunakan *purposive sampling*. Foto MRI kepala dan hasil Ki-67 dari 29 subjek yang memenuhi kriteria inklusi diambil untuk dianalisis. Data diambil dari PACS dan rekam medis.

Hasil: Mayoritas sampel berjenis kelamin perempuan (82,8%) dan rerata berusia 51,1 tahun. Lokasi meningioma terbanyak di *Convexity* (69,0). Lateralisasi didapatkan pada 22 pasien (75,9%). Derajat histopatologi menurut *grading WHO* terbanyak *grade 1* (44,8%). Terdapat hubungan yang signifikan ukuran tumor pada *Radiologic features* dengan Ki 67 ($p=0,014$, $r=0,450$). Didapatkan Hubungan yang signifikan antara lateralisasi dengan Ki 67 ($p=0,046$; $r=0,373$). Tidak ditemukan hubungan yang signifikan antara lokasi Meningioma dengan Ki 67 ($p=0,989$; $r=0,003$).

Kesimpulan: Terdapat hubungan yang signifikan ukuran tumor pada *Radiologic features* dengan Ki 67. Terdapat hubungan yang signifikan antara lateralisasi dengan ki 67. Tidak ditemukan hubungan yang signifikan antara lokasi Meningioma dengan Ki 67 ($p=0,989$; $r=0,003$).

Kata Kunci: Meningioma, Ki-67, *radiologic feature*, lokasi, lateralisasi.

**RELATIONSHIP BETWEEN RADIOLOGIC FEATURES, LOCATION
AND LATERALIZATION OF MENINGIOMA
ON HEAD MRI EXAMINATION WITH Ki-67 EXPRESSION**

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ABSTRACT

Background: Meningioma is the most common primary intracranial tumor with an incidence of 2.3 – 8.3 per 100,000 people. The Ki-67 index is a consistent factor for differentiating anaplastic and benign meningiomas. Radiologic feature findings, location, lateralization of meningioma on MRI of the head are useful in predicting Ki-67 in meningioma patients to determine prognosis and therapy.

Objective: This study aims to determine the relationship between radiological features, location and lateralization of meningioma on head MRI examination with Ki-67 expression.

Method: This research with a cross sectional design was carried out at Dr Sardjito Hospital Yogyakarta by taking secondary data from patients who underwent head MRI and anatomical pathology examinations with Meningioma results at Sardjito Hospital Yogyakarta for the period January 2019-November 2023. Subjects were taken using purposive sampling. Head MRI photographs and Ki-67 results from 29 subjects who met the inclusion criteria were taken for analysis. Data were taken from PACS and medical records.

Results: The majority of the sample was female (82.8%) and the average age was 51.1 years. The most common meningioma locations were in Convexity (69.0). Lateralization was found in 22 patients (75.9%). The highest degree of histopathology according to WHO grading was grade 1 (44.8%). There is a significant relationship between tumor size and radiologic features with Ki 67 ($p=0.014$, $r=0.450$). A significant relationship was found between lateralization and Ki 67 ($p=0.046$; $r=0.373$). No significant relationship was found between Meningioma location and Ki 67 ($p=0.989$; $r=0.003$).

Conclusion: There is a significant relationship between tumor size and radiologic features with Ki 67. There is a significant relationship between lateralization and Ki 67. There was no significant relationship between the location of the meningioma and Ki 67 ($p=0.989$; $r=0.003$).

Keywords: Meningioma, Ki-67, radiological features, location, lateralization.