

INTISARI

Latar Belakang: Meningioma merupakan salah satu tumor primer intrakranial tersering. Kejang sering menjadi manifestasi klinis meningioma dan berhubungan hipereksitabilitas kortikal akibat perubahan pada lingkungan peritumoral. Sampai saat ini, hubungan antara kejang pre-operatif dan derajat keganasan meningioma masih belum banyak diteliti.

Tujuan: Mengevaluasi hubungan antara kejang pre-operatif dengan derajat meningioma berdasarkan klasifikasi World Health Organization (WHO) 2021.

Metode: Penelitian ini merupakan studi analitik observasional dengan desain potong lintang pada pasien meningioma yang menjalani operasi dan terdiagnosis secara histopatologis di RSUP Dr. Sardjito periode Januari 2023–November 2025. Variabel bebas adalah kejang pre-operatif, sedangkan variabel terikat adalah derajat meningioma (derajat rendah: WHO I; derajat tinggi: WHO II–III). Analisis dilakukan dengan uji statistik bivariat dan multivariat.

Hasil: Dari 179 pasien, 28,5% mengalami kejang pre-operatif dan 30,7% memiliki meningioma derajat tinggi. Proporsi derajat tinggi lebih besar pada kelompok dengan kejang dibanding tanpa kejang (39,2% vs 27,3%). Pasien dengan kejang memiliki peluang 1,71 kali mengalami meningioma derajat tinggi (OR 1,71; IK95% 0,86–3,39), namun tidak bermakna secara statistik ($p=0,12$).

Kesimpulan: Terdapat kecenderungan peningkatan proporsi meningioma derajat tinggi pada pasien dengan kejang pre-operatif, namun hubungan tersebut tidak signifikan secara statistik. Kejang pre-operatif tidak terbukti sebagai prediktor independen yang bermakna terhadap derajat meningioma

Kata kunci: Meningioma, Kejang Pre-Operatif, Derajat WHO, Prediktor.

ABSTRACT

Background: Meningioma is one of the most common primary brain tumors. Seizures, a frequent clinical manifestation, are thought to reflect peritumoral cortical hyperexcitability. However, evidence regarding the association between preoperative seizures and meningioma grade remains limited.

Objective: To evaluate the association between preoperative seizures and meningioma grade according to the 2021 World Health Organization (WHO) classification. at Dr. Sardjito General Hospital, Yogyakarta.

Method: This analytical cross-sectional study included patients with histopathologically confirmed meningioma who underwent surgery at Dr. Sardjito General Hospital, Yogyakarta, between January 2023 and November 2025. The independent variable was preoperative seizures, and the outcome was tumor grade (low grade: WHO I; high grade: WHO II–III). Bivariate and multivariate analyses were performed.

Result: Among 179 patients, preoperative seizures occurred in 28.5% of patients, and 30.7% had high-grade meningioma. High-grade tumors were more frequent in patients with seizures compared to those without (39.2% vs 27.3%). Bivariate analysis showed that patients with seizures had 1.71 times higher odds of high-grade meningioma (OR 1.71; 95% CI 0.86–3.39), although this association was not statistically significant ($p=0.12$).

Conclusion: Although a higher proportion of high-grade meningioma was observed among patients with preoperative seizures, the association was not statistically significant. Preoperative seizures were not proven to be an independent predictor of meningioma grade.

Keywords: Meningioma, Preoperative Seizure, WHO Grade, Predictor.