

RESULTS: A total of 75 tumors FM (62%), and 46 PM (38%) meningiomas were included. The median tumoral volume was 31.1 cm³ (IQR 17.1-65.4). Low-grade lesions comprised n=77 WHO grade 1 tumors, whereas the high-grade group (HG) included n=35 grade 2 (28.9%), and n=9 grade 3 lesions (7.4%). Patients harboring HG lesions showed significantly higher baseline Hb levels significantly compared to LG (mean 14.4 ± 1.59 vs 13.7 ± 1.25 g/dl, p=0.04). Preoperative Hb demonstrated a predictive value of lesional grade (OR 1.35, 95% CI: 1.01-1.85, p=0.04). Accordingly, patients showing increased Hb levels >15.4 g/dl achieved shorter OS (60.4 months, 95% CI: 14.7-106.1 vs 137.4 months, 95% CI: 111.2-163.6), p=0.0011 compared to patients with lower preoperative Hb values. **CONCLUSION:** Increased levels of circulating erythrocytic hemoglobin might be independent predictors for high-grade histology, and correlate with shorter overall survival in falcine and parasagittal meningiomas.

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P19.17.B THE PREOPERATIVE LEVELS OF CIRCULATING ERYTHROCYTIC HEMOGLOBIN ARE INDEPENDENT PREDICTORS FOR WHO GRADE 2-3 HISTOLOGY IN FALCINE AND PARASAGITTAL MENINGIOMAS

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BACKGROUND: Falcine and parasagittal lesions stand out among other intracranial meningiomas for their extreme histological heterogeneity, accounting for the highest rate of high-grade lesions. The ability to preoperatively estimate the lesion's grade and its clinical outcome would be of great value in orienting and customizing the treatment approach in these patients. To date, no validated clinical or radiological predictive factors for tumoral grade and prognosis are available. **MATERIAL AND METHODS:** This is a single-center, retrospective, clinical study designed to assess the diagnostic and prognostic role of pre-operative peripheral blood markers in patients harboring falcine (FM) and parasagittal (PM) high-grade meningiomas. A total of 121 patients undergoing surgical resection for a single FM/PM lesion at San Raffaele Hospital between November 2007 and April 2021 were included. A propensity score-matched analysis has been performed to account for gender imbalances in the low-grade (LG) vs high-grade (HG) cohorts.