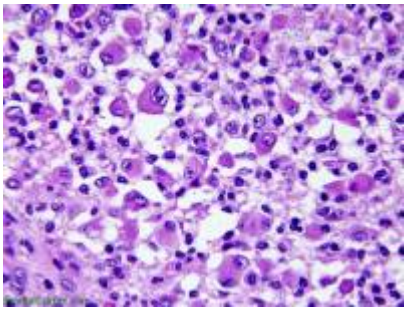
Rhabdoid meningioma



Rhabdoid meningiomas are rare aggressive variant, adopted in WHO classification of CNS neoplasm (2000) and belonged to WHO Grade III subtype [1) 2)].

Outcome

The behavior of rhabdoid meningiomas otherwise lacking malignant features remains unknown as most of the originally reported aggressive cases showed anaplastic histologic features independently of rhabdoid phenotype.

Rhabdoid meningioma is a malignant subtype of meningioma that occurs very rarely in pediatric patients. Additionally, rhabdoid meningioma, when it does occur in pediatric patients, has a high tendency to recur. Radical surgical resection with adjuvant radiotherapy is essential to prolonging survival.

Khairy et al.,reported the first case with extracranial extension to the mediastinal veins and heart [3)].

Case series

44 patients with rhabdoid meningiomas lacking anaplastic features. Median age at diagnosis was 48.6 years (range 10-79). Location was supratentorial in 28 (63.6%), skull base in 15 (34.1%), and spinal in 1 (2.3%). Tumor grade was otherwise World Health Organization grade I (n = 22, 50%) or II (n = 22, 50%). Rhabdoid cells represented <20% of the tumor in 12 cases (27.3%), 20% to 50% in 18 (40.9%), and >50% in 14 (31.8%). Median clinical follow-up, available for 38 patients, was 5.0 years (range 0.17-14.2). Recurrence occurred in 9 patients (5-year recurrence-free survival, 73.7%) with a significantly higher risk in subtotally resected tumors (p = 0.043). Rhabdoid cell percentage was not associated with recurrence. Six patients died (4 of disease, 2 of unclear causes); 5-year overall survival was 86.7%, a mortality in excess of that expected in grade I-II meningiomas but much lower than originally reported. Review of 50 similar previously reported cases confirmed this findings. The authors suggest that rhabdoid meningiomas be graded analogously to nonrhabdoid tumors, with caution that some may still behave aggressively and close follow-up is recommended [4)].

Case reports

Rhabdoid meningioma case reports.

References

1)
Kar A, Rath G, Mohanty L, Behera P, Mohapatro S, Lenka A, et al. Rhabdoid meningioma-An uncommon and aggressive variant. J Cancer Sci Ther. 2013;5:343–5.
2)
Kakar V, Elsmore A. Rhabdoid meningioma: Rare and highly aggressive. Internet J Neurosurg. 2005;3:1–5.
3)
Khairy S, Al-Ahmari AN, Saeed MA, Azzubi M. Pediatric Rhabdoid Meningioma with extension to the heart, a first case report and literature review. World Neurosurg. 2019 Jun 24. pii: S1878-8750(19)31669-9. doi: 10.1016/j.wneu.2019.06.117. [Epub ahead of print] PubMed PMID: 31247353.
4)
Vaubel RA, Chen SG, Raleigh DR, Link MJ, Chicoine MR, Barani I, Jenkins SM, Aleff PA, Rodriguez FJ, Burger PC, Dahiya S, Perry A, Giannini C. Meningiomas With Rhabdoid Features Lacking Other Histologic Features of Malignancy: A Study of 44 Cases and Review of the Literature. J Neuropathol Exp Neurol. 2016 Jan;75(1):44-52. doi: 10.1093/jnen/nlv006. Epub 2015 Dec 7. PubMed PMID: 26705409.