Giant hypervascular intracranial tumor

Giant hypervascular intracranial tumors represent a formidable challenge as their size limits surgical control of the blood supply and debulking poses the risk of critical blood loss. Embolization facilitates resection but carries the risk of life-threatening tumor infarction, hemorrhage, or swelling if performed preoperatively. Endovascular intraoperative embolization avoids the fatal risk and allows the surgeon to attend instantly if any complication occurs.

Almefty et al. report two cases in which combining intraoperative embolization with microsurgical resection in the hybrid operating room was used to safely and successfully remove giant, hypervascular tumors.

Intraoperative embolization facilitates the safe resection of giant hypervascular tumors and mitigates the consequences of potential tumor infarction, hemorrhage, or swelling from embolization. These cases exemplify the benefits of combining expertise in endovascular and microsurgical techniques with the capabilities of modern hybrid operating rooms allowing for their simultaneous application [1].

1)
Almefty RO, Patel NJ, See AP, Dunn IF, Al-Mefty O, Aziz-Sultan MA. Hybrid Surgery Management of Giant Hypervascular Tumors: Intraoperative Endovascular Embolization with Microsurgical Resection. World Neurosurg. 2017 Mar 1. pii: S1878-8750(17)30265-6. doi: 10.1016/j.wneu.2017.02.092. [Epub ahead of print] PubMed PMID: 28259671.