Intracranial hemangioblastoma treatment

Solid HGBs tend to be more difficult to remove. They are treated like AVMs (avoid piecemeal removal), working along margin and devascularizing blood supply. A helpful technique is to shrink the tumor by laying a length of bipolar forceps along tumor surface and coagulating. HGBs with attachment to floor of 4th ventricle may be hazardous to remove (cardio-respiratory complications).

Multiple lesions: if ≥ 0.8–1 cm diameter: may treat as in solitary lesion. Smaller and deeper lesions may be difficult to locate at the time of surgery.

Surgical treatment is total resection, with the main goal being the preservation of surrounding neural tissue.

The tumors usually are well demarcated from the surrounding brain or spinal cord, but this border of separation does not contain any particular membrane or capsule.

Multiple feeding arteries are often present, as well as more than one abnormally thick draining vein, with large diameters and thick walls.

Simultaneous 3D visualization of feeding arteries, draining veins, and surrounding structures are needed.

The surgical approach must be wide enough to avoid compression of the healthy tissues during retraction. A thorough evaluation of preoperative imaging studies is the key to the safest possible exposure of the tumor.

Preoperative embolization of hemangioblastoma may help reduce the vascularity.

Preoperative embolization of intracranial hemangioblastoma

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Stereotactic radiosurgery for intracranial hemangioblastoma

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