

## Decision Making In Skull Base Surgery

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Skull Base Surgery has become an established neurosurgical discipline since the late 80's. The initial enthusiasm of achieving eradication of a seemingly 'inoperable' lesion by novel skull base approaches led many neurosurgeons to employ radical surgery. The accompanying high morbidity was accepted as inevitable. Over the years, however, many started questioning this philosophy and the last decade saw the pendulum swing to the other extreme with the popularity of endoscopic surgery and radiosurgery. Thus, minimally invasive neurosurgery became the fashion. *However, it is important to remember "the pearl" that inadequate treatment through a less invasive approach is maximally invasive.* Realization has now dawned that endoscopic surgery and radiosurgery cannot replace skull base surgery. A judicious use of skull base approaches, with appropriate adjuncts like neuroendoscope and image guidance is the best way forward in dealing various skull base pathology. Measures preventing neurovascular damage during surgery, adequate closure to prevent CSF leaks, the bug bear of skull base surgery, and quick remedial measures to treat CSF leaks will go a long way to achieve acceptable results. Radical but safe excision in skull base tumors followed by adjunct radiosurgery, if necessary, will result in long term control. Examples of skull base meningiomas, chordoma, giant aneurysm, vestibular schwannomas and jugular foramen tumors thus managed will be demonstrated on video. Our philosophy is that of Optimally Invasive Neurosurgery, individualizing the approach to suit the given patient with a goal to achieve maximal result with minimal damage to the patient. Neuroendoscope, image guidance and radiosurgery are all utilized as pillars on the foundation of microsurgery! Various examples will be shown on video trying to answer some of the following decision dilemmas:

- (1) to treat or not,
- (2) microsurgery or radiosurgery,
- (3) which surgical approach and
- (4) total or subtotal excision