NSPC
Brain & Spine
Surgery

Tel: (516) 255-9031
Offices in Lake Success & Rockville Centre

Meningiomas

Case Illustrations by **Michael H. Brisman, M.D.**

Meningiomas are growths that are almost always benign, that arise from the covering layer of the brain, also known as the "meninges". They can arise anywhere from this covering layer. They are classified on a 3 point World Health Organization (WHO) grading system. Grade 1 is "benign", and is the most common type; Grade 2 is "atypical", is somewhat more aggressive, and is less common; Grade 3 is "malignant", and is rare. All types can potentially be treated with surgery and radiosurgery (super-focused radiation). Chemotherapy is usually reserved for malignant meningiomas, and sometimes for atypical meningiomas.

Meningiomas that are very large will usually be surgically removed. Meningiomas that are very small or that show little change over time will frequently be observed with follow-up MRI imaging. Meningiomas of intermediate size, particularly if they are enlarging, are usually good candidates for Radiosurgery treatment. Meningiomas that have "residual" after surgery or "recur" after surgery would also be good candidates for Radiosurgery treatment.

Meningiomas that are large in which surgery might be higher risk may be considered for "staged" radiosurgery treatments. That is, part of the tumor might be treated in one Radiosurgery session, then, months later, the remaining tumor could be treated in a subsequent session.

Brain meningiomas can occur in many different parts of the brain. As such, different surgical approaches are needed for different meningiomas.

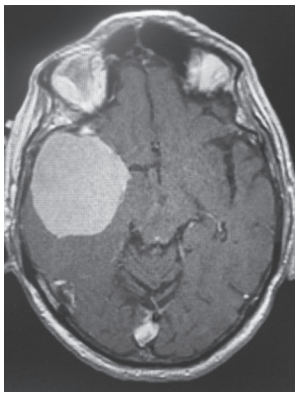
Ten cases will be presented of brain meningiomas that were surgically removed by Dr.Michael Brisman. Patients did well clinically in all cases, and suffered no neurological deficits as a result of the surgery.

Board certified by the American Board of Neurological Surgeons and a Fellow of the American College of Surgeons, Michael H. Brisman, M.D., specializes in the treatment of brain tumors, including meningiomas, and trigeminal neuralgia. He serves as the Co-Medical Director of the Long Island Gamma Knife Center at South Nassau Hospital and has served as the Chief of Neurosurgery at NYU-Winthrop. In addition, Dr. Brisman has also served as the President of both the Nassau County Medical Society and the New York State Neurosurgical Society.

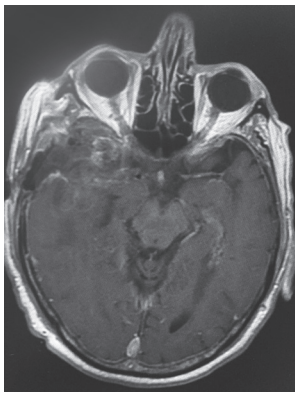
For Dr. Michael Brisman's complete biography, visit **nspc.com**.

CASE 1:
Right Sphenoid Wing/ Temporal Meningioma

This is an 80 year old man with personality changes, found to have a 6 cm right sphenoid wing / temporal meningioma. Using a right temporal craniotomy, the tumor was separated from the sylvian vessels and removed. Subsequently, his pre-operative symptoms all resolved.



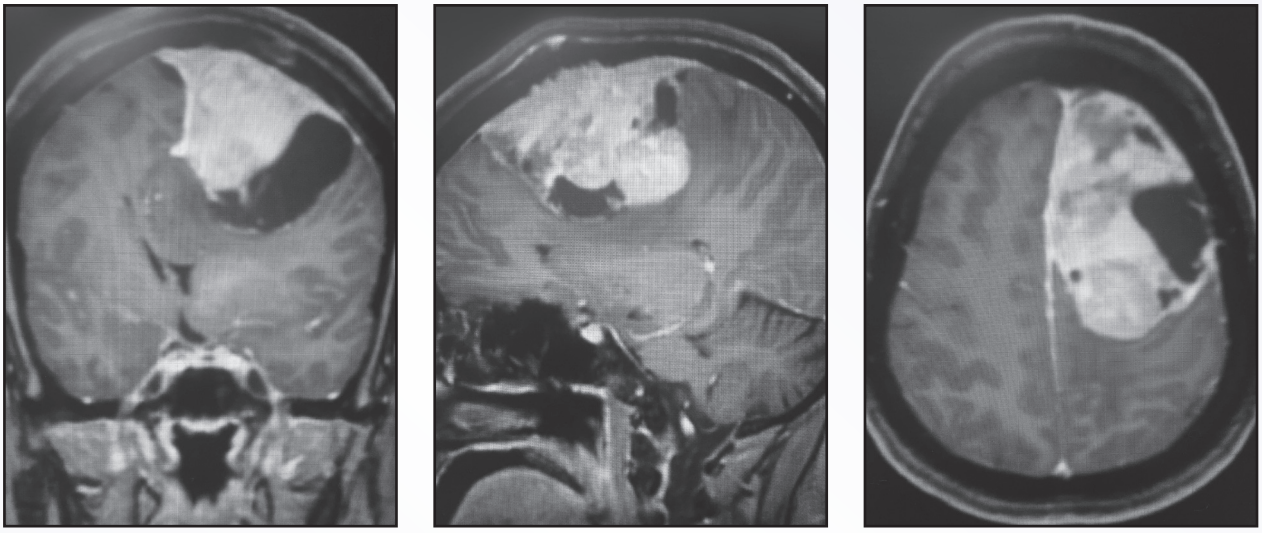
Case 1: Pre-Operative Image



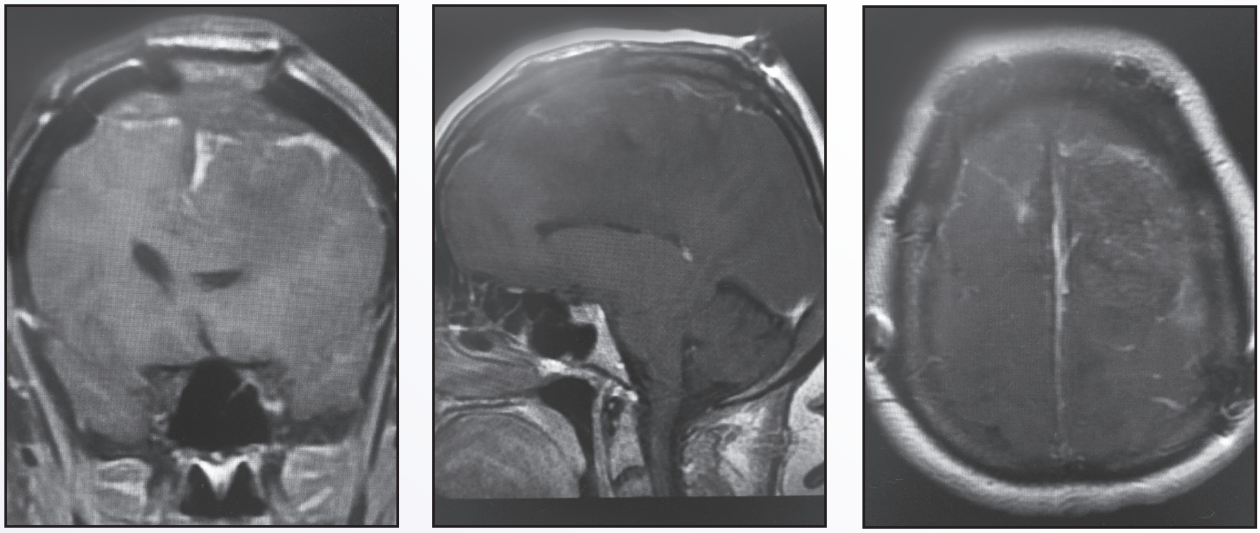
Case 1: Post-Operative Image

CASE 2:
Left Frontal Convexity and Falx Meningioma

This is a 55 year old woman who was having progressive balance problems who was found to have a 7cm partly cystic meningioma involving the left frontal convexity and falx, and encasing the superior sagittal sinus. The tumor was removed via a bifrontal craniotomy with resection of a diseased portion of the superior sagittal sinus, and subsequent cranioplasty. The patient's pre-operative symptoms all resolved.



Case 2: Pre-Operative Images

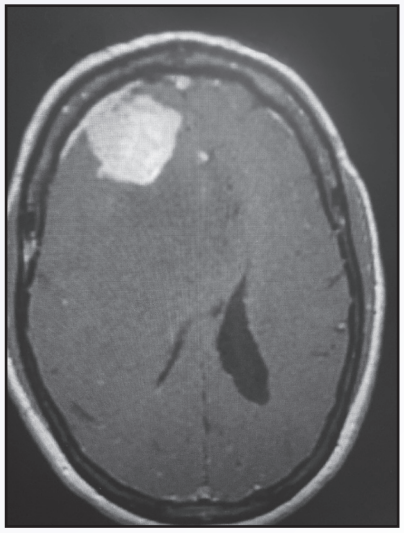


Case 2: Post-Operative Images

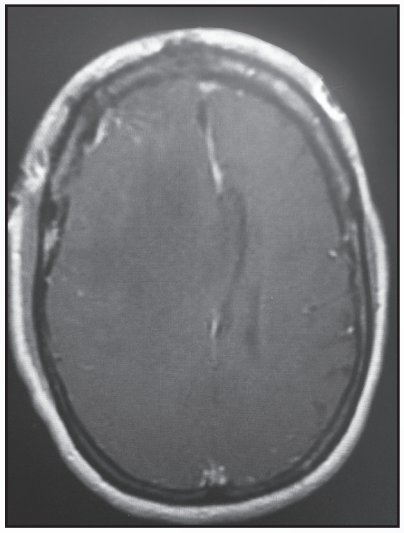
Case Illustrations by **Michael H. Brisman, M.D.**

CASE 3:
Right Frontal Convexity Meningioma

This is a 54 year old woman with progressive headaches found to have a right frontal convexity meningioma with enormous surrounding edema and midline shift. Her tumor was removed via a right frontal craniotomy. Her pre-operative headaches fully resolved.



Case 3: Pre-Operative Image



Case 3: Post-Operative Image

CASE 4:
Left Posterior Fossa Tentorial Meningioma

This is a 53 year old woman who experienced progressive headaches and unsteadiness, found to have a 5cm left posterior fossa meningioma growing inferiorly from the tentorium with midline shift and early hydrocephalus. The tumor was removed via a combined left occipital/suboccipital craniectomy, with resection of a portion of the left tentorium, and subsequent cranioplasty. A temporary right frontal ventriculostomy was placed and later removed. The patient's pre-operative symptoms all subsequently resolved.

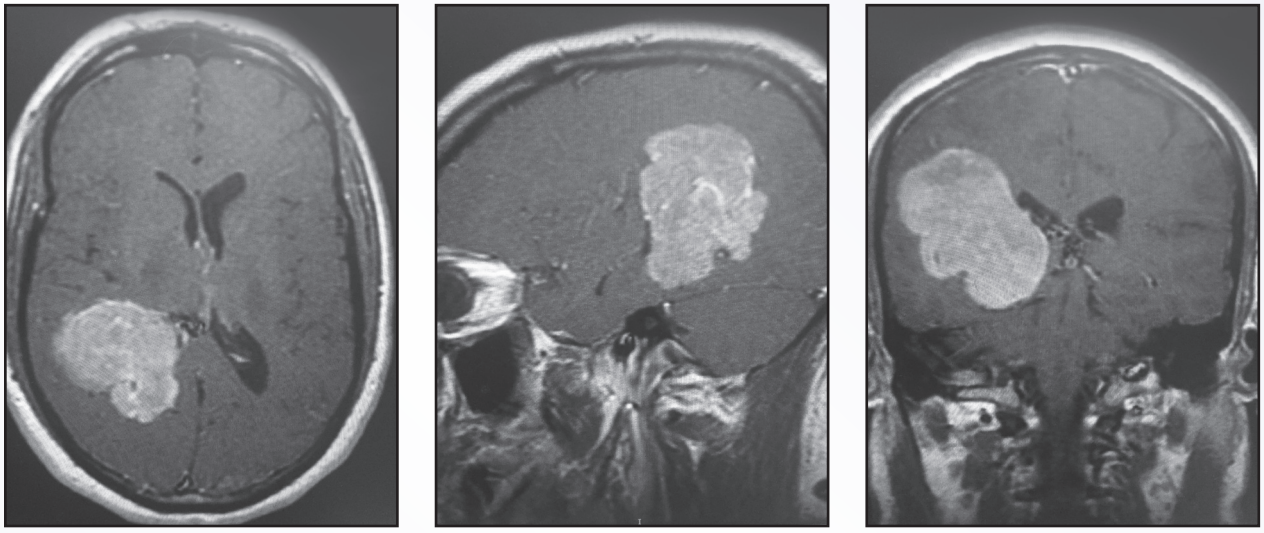
Case 4: Pre-Operative Image

Case 4: Post-Operative Image

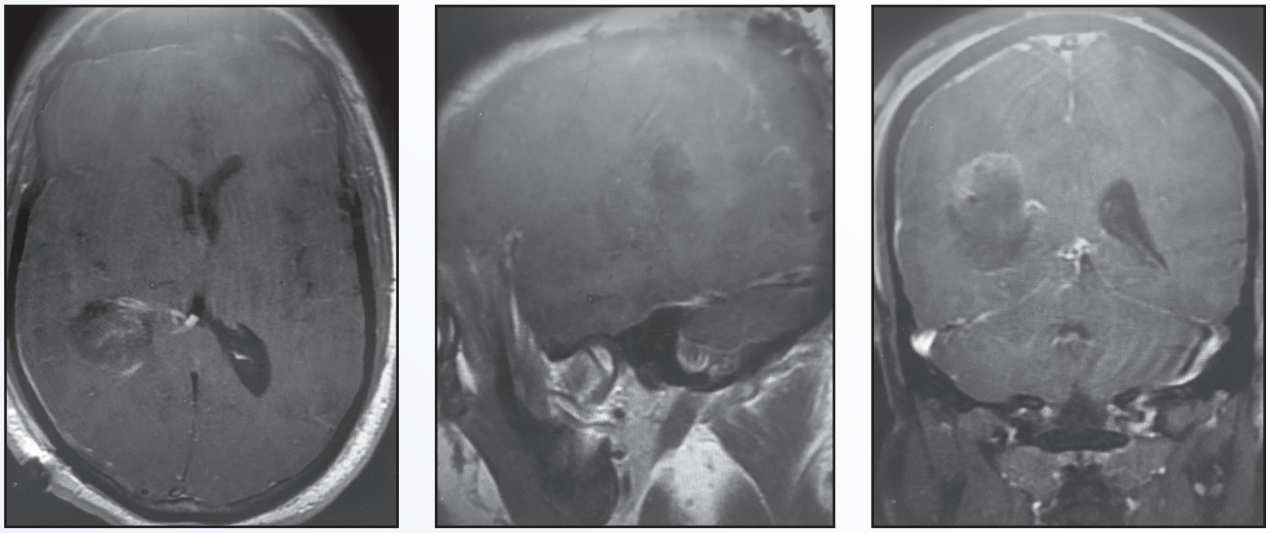
Case Illustrations by **Michael H. Brisman, M.D.**

CASE 5:
Right Atrial Meningioma

This is a 45 year old man with headaches, nausea and blurry vision, found to have a large meningioma arising from the atrium of the right lateral ventricle. His tumor was removed via a right parietal craniotomy and transcortical approach through the superior parietal lobule. Subsequently, his pre-operative symptoms improved.



Case 5: Pre-Operative Images

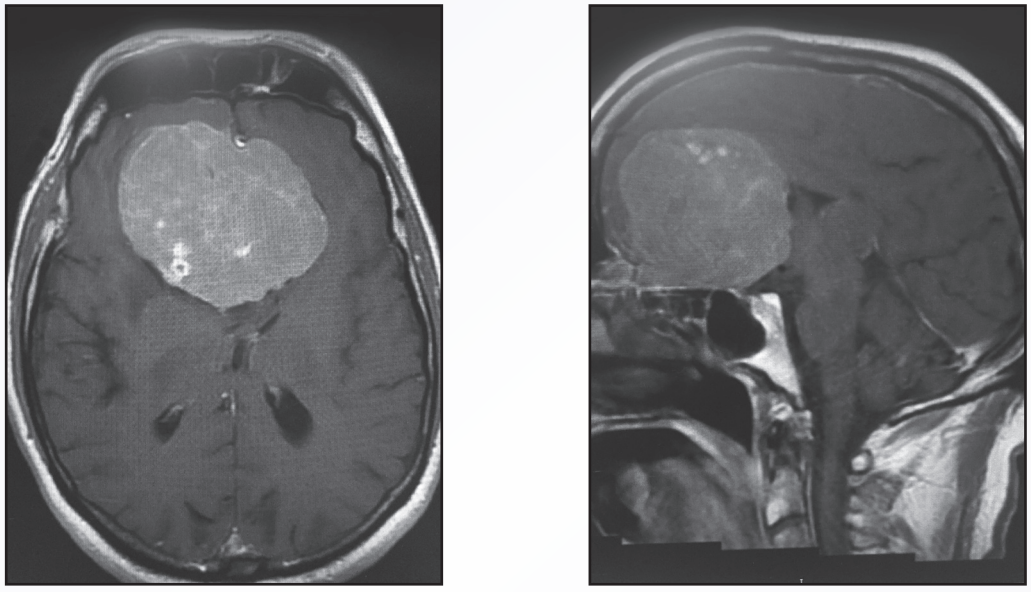


Case 5: Post-Operative Images

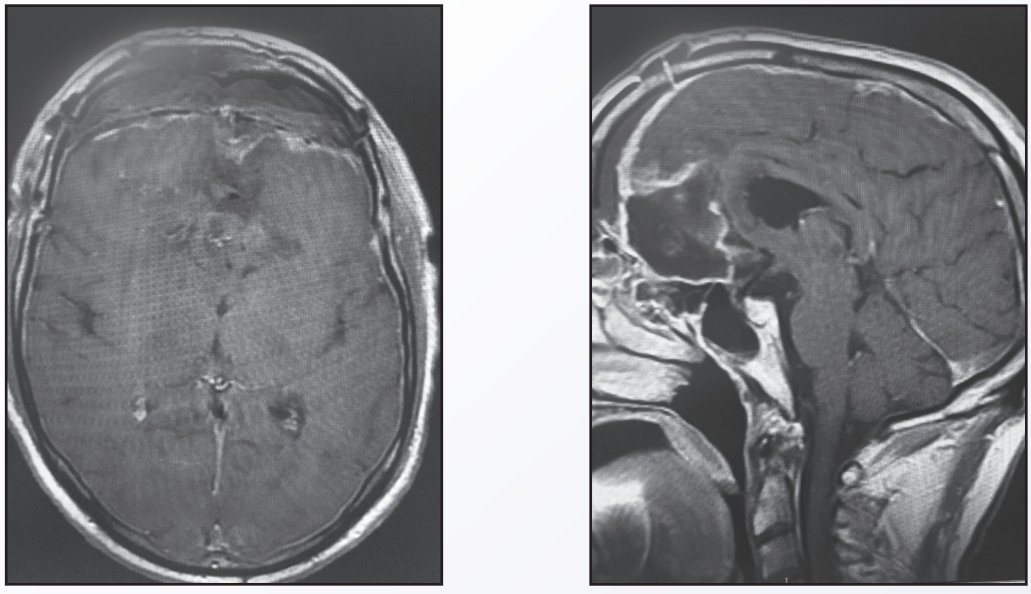
Case Illustrations by **Michael H. Brisman, M.D.**

CASE 6:
Olfactory Groove Meningioma

This is a 70 year old man who presented with gait imbalance and personality changes found to have a 7.5 cm olfactory groove meningioma. The tumor was removed via a bifrontal craniotomy, subfrontal approach, with exenteration of both frontal sinuses, and sectioning of the anterior falx. Post-operatively, all pre-operative symptoms resolved.



Case 6: Pre-Operative Images

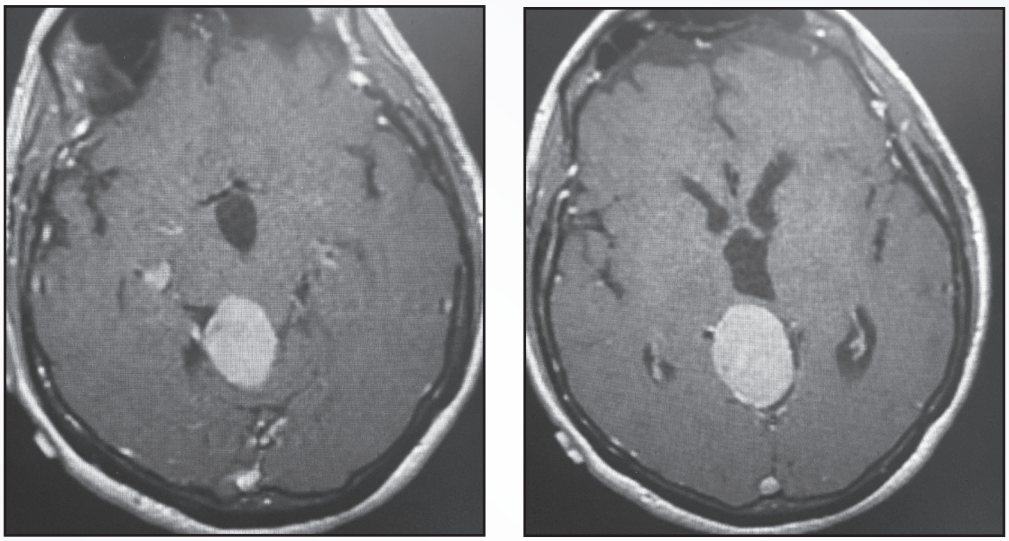


Case 6: Post-Operative Images

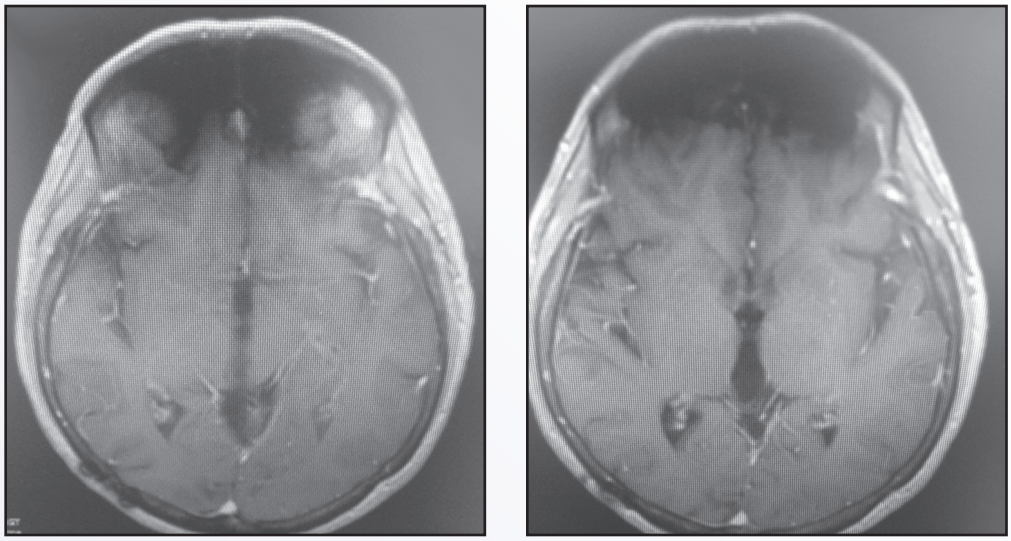
Case Illustrations by **Michael H. Brisman, M.D.**

CASE 7:
Pineal Region Meningioma

This is a 57 year old woman with new onset memory problems and gait difficulty found to have a 3 cm pineal region meningioma growing inferiorly off the right tentorium causing compression of the upper brainstem and hydrocephalus. The tumor was removed via a right occipital / transtentorial approach. Subsequently the hydrocephalus resolved and did not require shunting. Her pre-operative symptoms all resolved.



Case 7: Pre-Operative Images

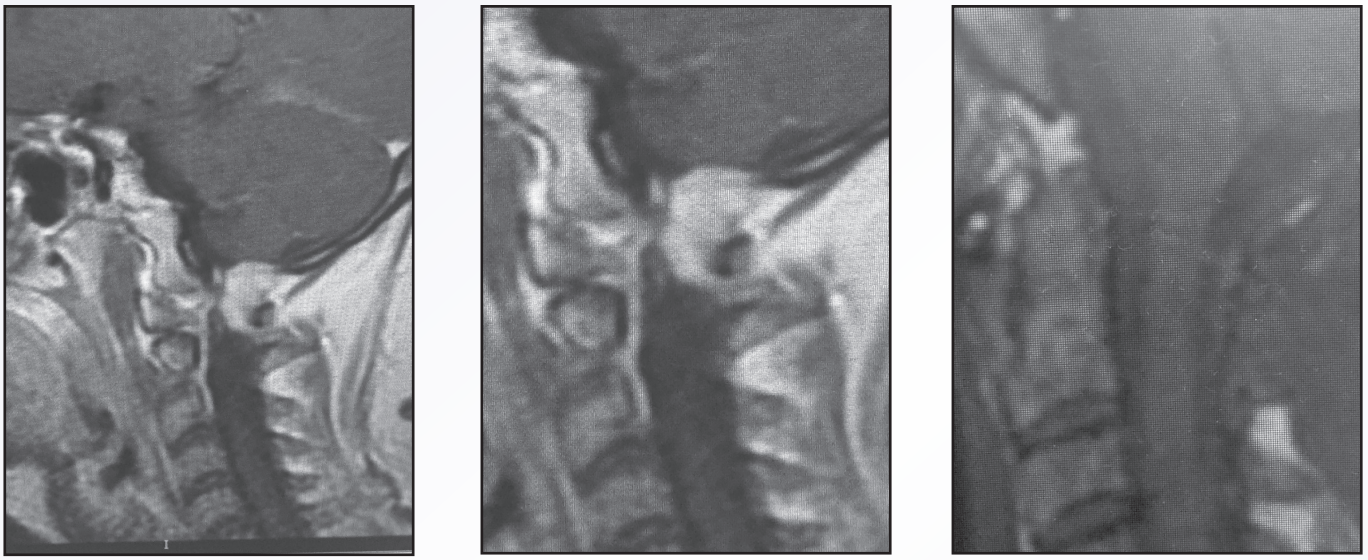


Case 7: Post-Operative Images

Case Illustrations by **Michael H. Brisman, M.D.**

CASE 8:
Foramen Magnum Meningioma

This is a 62 year old woman who was experiencing progressive pain in the back of her head and upper neck. She was found to have a foramen magnum meningioma compressing her lower brainstem and upper spinal cord. The tumor was removed via a midline suboccipital craniectomy and C1 laminectomy. Post-operatively, her headaches resolved.

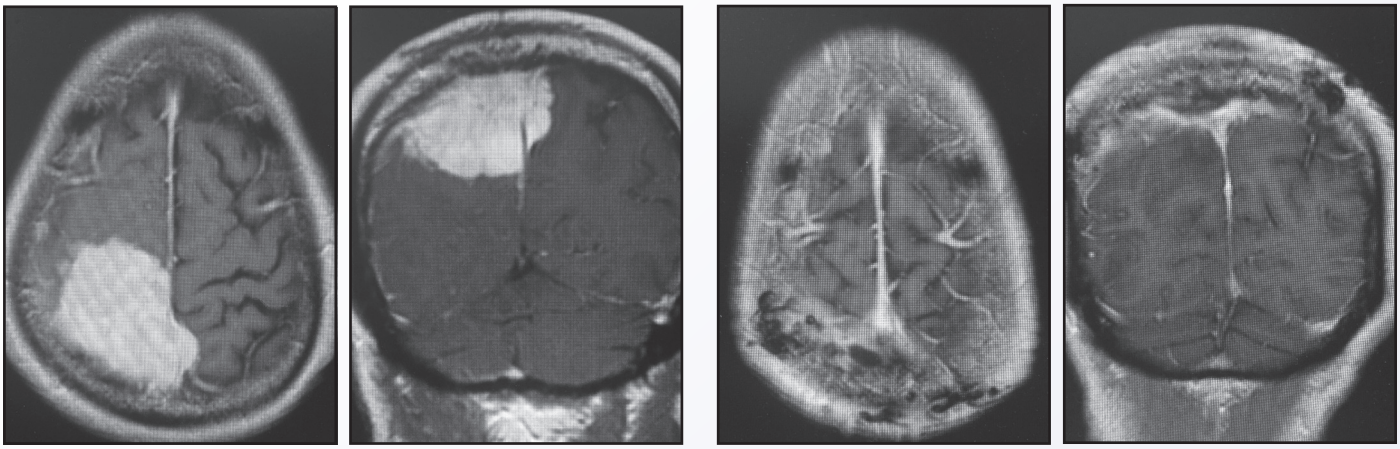


Case 8: Pre-Operative Images

Case 8: Post-Operative Image

CASE 9:
Right Parietal Convexity and Falx Meningioma

This is a 68 year old man who was having progressive weakness of his right arm and leg found to have a large right parietal meningioma involving the convexity and falx, growing off somewhat to the left side, and filling a portion of the superior sagittal sinus. The tumor was removed via a bilateral parietal craniotomy with resection of the involved segment of superior sagittal sinus. His pre-operative symptoms resolved.



Case 9: Pre-Operative Images

Case 9: Post-Operative Images

Case Illustrations by **Michael H. Brisman, M.D.**

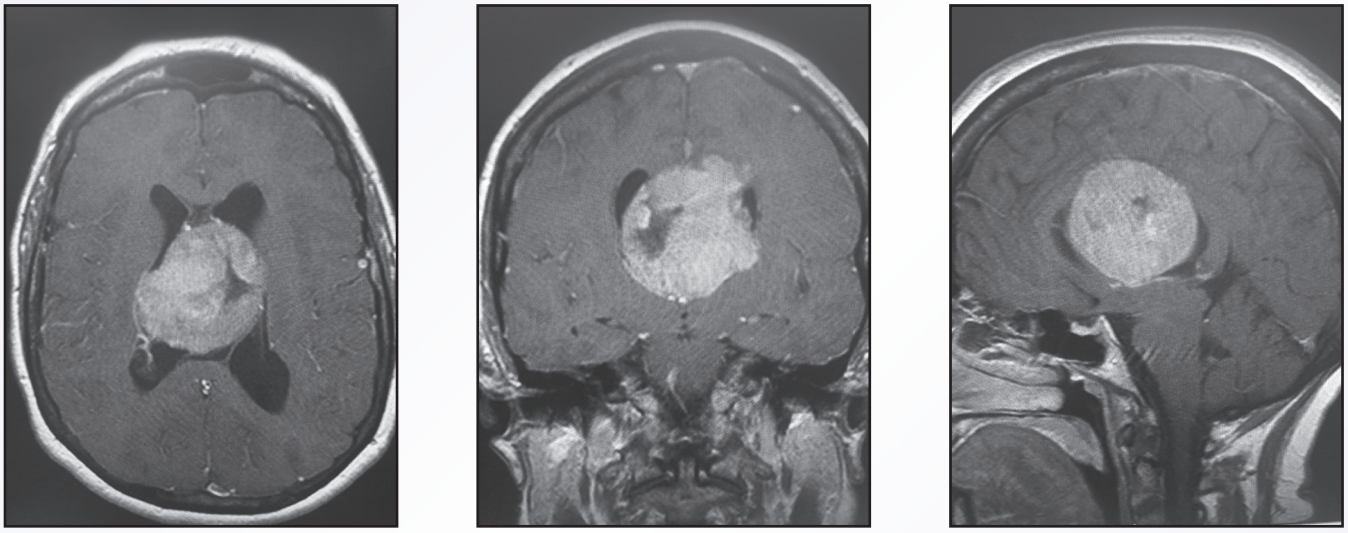
Neurological Surgery, P.C.
100 Merrick Road • Suite 128W
Rockville Centre, NY 11570
Tel: (516) 255-9031

Meningiomas

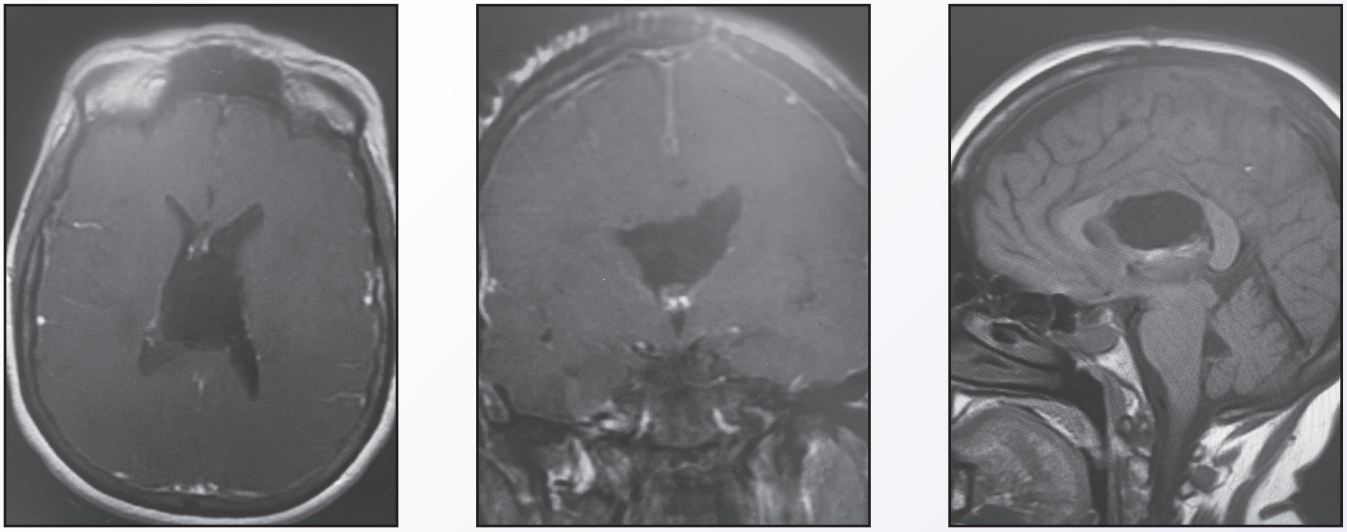
Case Illustrations by **Michael H. Brisman, M.D.**

CASE 10:
Bilateral Intraventricular Meningioma

This is a 62 year old woman who presented with gait instability, leg weakness, vision problems, urinary incontinence, and memory problems. She was found to have a very large meningioma filling both lateral ventricles. Her tumor was removed via a right frontal craniotomy, with a transcortical approach using the Vycor tubular retractor. No shunt was needed. Post-operatively, her symptoms improved.



Case 10: Pre-Operative Images



Case 10: Post-Operative Images