

(A Health Awareness Initiative)

NEURO NEWSLINE

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MENINGIOMA - a benign tumour of the brain !

Meningioma are tumours that arise from the meninges, a membrane that surrounds the brain and the spinal cord. Harvey Cushing, an American neurosurgeon also known as the father of modern neurological surgery coined this term called 'Meningioma'. Most of these tumours grow inside the brain, though some of these tumours do occur in the spinal cord as well.

Usually meningiomas are benign in nature and are slow growing often asymptomatic. A small number of them are cancerous, especially those which grow very rapidly leading to devastating clinical symptoms causing neurological deficits. These can also infiltrate the brain, the skull vault/base and surrounding soft tissues. The risk factors includes a genetic disorder called the 'Neurofibromatosis type 2', exposure to radiation, traumatic skull fractures where there is scarification of the underlying meninges. Women are affected twice as men due to the effect of a hormone called progesterone. The common age group affected by these tumours range from 35 years to 70 years, and it is quite uncommon in children.

SYMPTOMS & SIGNS

Symptoms develop gradually as these tumours are slow growing. Some patients develop seizures

(epilepsy) for the first time in life due to the presence of a Meningioma. Intense headache with or without vomiting, blurring of vision with defective eye sight, speech problems, weakness or numbness affecting the limbs and difficulty in walking (ataxia) are some of the common presentation of these tumours. Some do have loss of smell or hearing in addition to headache

symptomatic needs a craniotomy and surgical excision of the tumour. It is aided by the microscope, sometimes assisted with neurosurgical endoscopes and ultrasonic surgical aspirator (SONOCA). The location of the tumour and its size determines the extent of its surgical removal. At times, tumour capsule adherent to complex nerve structures and blood



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(Picture shows a large Meningioma compressing the cerebellum operated a year ago)

which is a symptom of raised intracranial pressure.

DIAGNOSIS

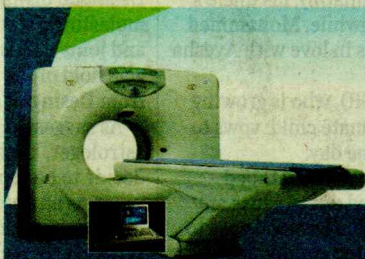
MRI or a CT scan of the brain with contrast will certainly show up the presence of a Meningioma. It also tells us the location of the tumour, its relationship to the vital structures like blood vessels and cranial nerves. An MR angiogram helps the neurosurgeon to assess the vascularity of the tumour and therefore plan strategy to eliminate the offending tumour.

TREATMENT

A majority of these meningiomas, especially the ones which are

vessels are left behind, and later treated with the help of radiation therapy (X knife, Gamma knife or Cyber knife are some of the modalities of radiation therapy available in our country). Radiation helps in shrinking the residual tumour and prevents it from growing again.

Very small tumour in the setting of an advanced age of the patient can be left alone for observation. On follow up scans, if these tumours tend to grow, the patients can be offered surgery. The prognosis is good considering the fact these Meningiomas are benign, except for the few occasional tumours that turn out to be a cancerous or a precancerous variant.



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