

(A Health Awareness Initiative)

NEURO NEWSLINE

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BRAINSTEM TUMOURS..... Its management !

Brainstem tumours occur both in the pediatric and adult population and the commonest is the brainstem glioma (BSG). The brainstem controls all the vital functions of our body like that of breathing, swallowing and the heart beat. Most of the time surgery in this area is not possible as it can damage neuronal structures in the brainstem that controls these important functions.

Brainstem glioma (BSG) tend to occur in childhood and adolescence, 77% found in less than 20 years old. They are one among the three common brain tumours occurring in the pediatric population. Due to their invasive nature, the symptoms usually do not occur until the tumour is extensive in size.

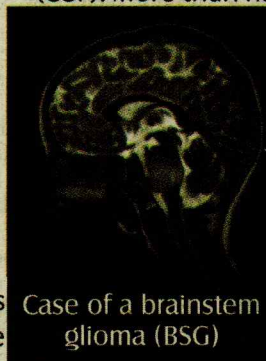
SIGNS & SYMPTOMS

A majority of the patients present with difficulty in walking, headache, nausea/vomiting, double vision and facial deviation

(weakness). A progressive weakness associated with numbness of all four limbs are common as the disease advances. Hydrocephalus usually occurs in 60% of the patients due to obstruction to the cerebrospinal fluid (CSF). More than half the

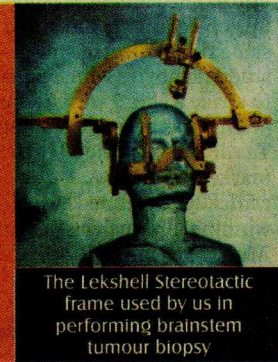
though CT imaging also helps to a certain extent.

Microsurgical excision is possible only in a small group of patients where the tumour projects into the ventricular surface (exophytic tumours). Most of the patients require a CT or MR guided stereotactic



Case of a brainstem glioma (BSG)

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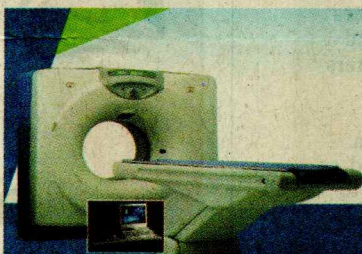
The Leksell Stereotactic frame used by us in performing brainstem tumour biopsy

patients present with symptoms of raised intracranial pressure like headache and vomiting. Children less than 2 years of age have poor feeding and appear malnourished.

DIAGNOSIS & TREATMENT

MRI brain with contrast is the investigation of choice and can differentiate malignant from benign tumours/lesions,

biopsy of these tumours so as to arrive at a diagnosis and also to find the stage/grade of the tumour. If malignant, radiation therapy (depending on the age of the child) and chemotherapy can be started. Children and adults who have a low grade tumour survive longer than the malignant cases, though the prognosis is guarded !



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