

(E) OUTCOME DATA

30-day Perioperative outcomes for intra-axial tumors (2007-2009)

Major morbidity:

Overall :	17%
Neurological worsening:	11%
Surgical site infection:	07%
Perioperative Mortality:	3.5%

SURVIVAL— GBM

These tumours account for almost half of the primary adult brain tumours and owing to their aggressive nature pose a difficult challenge in their management. we, at TMH however have been able to provide the best and world class treatment which is reflected in a better overall survival and better quality of life with the use of temozolamide along with radiation in concurrent(@75 mg/m²) followed by adjuvant setting @150-200mg/m² (for 6 cycles).in a study conducted by us the 2-, 3-, 4-, and 5-year survival was 34%, 24%, 11%, and 11%, respectively (95% CI 14.03–21.96). The median overall and progression-free survival was 18 (2–92 months) and 16 months (2–72 months), respectively. (*Journal of Clinical Oncology*, 2009 ASCO Annual Meeting Proceedings (Post-Meeting Edition)).

We have also been able to show some encouraging experience of concomitant Temozolomide with radiotherapy followed by adjuvant Temozolomide in newly diagnosed glioblastoma multiforme: single institution experience in which we showed a 2-year survival of 29.4% and a median survival of 16.4 months compares favourably with any other treatment regimen used previously in GBM. (*British Journal of Neurosurgery*, December 2007; 21(6): 583 – 587)

QUALITY OF LIFE (QOL)—We have conducted studies to assess the QOL in patients seen in routine clinical practice under the BTF and the work has been published in indexed journal.

The aim of this study was to evaluate and assess the impact of various factors on quality of life (QOL) in adult patients with primary brain tumours seen consecutively in routine neurooncology practice. Two hundred and fiftyseven adult patients, after undergoing surgical intervention and histologically proven primary brain neoplasms were registered in the NeuroOncology Clinic at our centre during 1 full calendar year. And found that Patients with a HGG and from high economic strata had more preserved global QOL function than patients in middle/low economic strata. It may well be that patients with HGG have usually functional impairments. Patients from high economic strata with comparatively better supportive care and rehabilitation may have helped them to preserve global QOL score to some extent. However,

in benign and low grade tumours where functional impairments are not so severe had no significant difference in different economic strata. (*J Neurooncol* (2009) 95:413–419 DOI 10.1007/s11060-009-9939-8)

ACTIVITIES OF DAILY LIVING (ADL)—

Barthel's Index has been used to assess the functional status with degenerative neuronal disorders in elderly patients with cerebrovascular accidents, brain injury, motor neuron disease, and hemiplegia. In patients with CNS tumours, BI has been used as well to evaluate the efficacy of supportive care or any intervention (radiotherapy or surgery), primarily in elderly patients with high-grade glioma. We, at TMH conducted a study for the Prospective assessment of activities of daily living using Modified Barthel's Index in children and young adults with low-grade gliomas treated with stereotactic conformal radiotherapy and concluded that Young patients with low-grade gliomas after surgical intervention had a lower than normal BI before starting radiotherapy, suggesting a decrease in ADL possibly due to tumour- and surgery-related factors. At 2-year and 3-year follow-up after SCRT, there was no further decrease in mean BI. A significant improvement in BI was seen in visually handicapped patients, patients with poor performance status, and younger patients. Patients who developed tumour recurrence at follow-up had a significantly lower BI at baseline than patients with controlled disease (P B 0.001). (*J Neurooncol* DOI 10.1007/s11060-008-9666-6)

These encouraging outcome data that is arguably one of the best around the world is an indication of the hard work, dedication and the policies of our BTF which is proving to be a boon for the patients of all classes and socio economic strata in their fight against brain tumours.

The **BTF** works with the prime objective to minimize the physical, emotional and financial suffering associated with the diagnosis, treatment and rehabilitation of patients with brain and spine tumours, and their families.

- Facilitate the treatment, accommodation, transportation, rehabilitation and special education of such patients. Support the cost of investigation, treatment and rehabilitation for really needy patients with potentially curable tumour. Support research into the causes, treatment and rehabilitation of brain tumour patients. Provide information and support to patients and care-givers of patients with brain tumours. Provide all types of counselling services, including psychological and grief counselling for the patient and the family before and after treatment.
- Public education via print and electronic media
- The **BTF** involves agencies such as Hospitals, doctors, occupational therapists, physiotherapists, speech therapists, psychologists and nurses (*presently from the Tata Memorial Hospital (TMH) and King Edward Memorial Hospital (KEM), Mumbai. Later, we plan to involve other centers in Mumbai and elsewhere*) *Medical Social Workers (at the Tata Memorial Hospital and from other agencies)* **Cancer Patients Aid Association** and V-Care Indian Cancer Society Ambulance services National Association for Blind **Spastics Society of India** and other organizations which can help us with their expertise and network. Schools: (Special Education Schools as well as normal schools that admit children with various degrees of neuropsychological problems).
- Patient's Support groups: A group of brain tumour survivors and their families in different parts of the country.