patients discontinued treatment in the adjuvant part, one at third cycle for prolonged grade 4 thrombocytopenia, and one after fifth cycle for prolonged grade 2 thrombocytopenia.
Conclusions: A prolonged maintenance TMZ chemotherapy doesn't impact negatively on toxicity profile.

2519 POSTER

A prospective study of cognition, mood and quality of life in patients receiving parasellar radiotherapy

M. Beasley[1], N. Bogod[2], M. Sinden[2], R. Ma[1]. *[1]British Columbia Cancer Agency, Radiation Oncology, Vancouver B.C., Canada; [2]Vancouver General Hospital, Psychology, Vancouver B.C., Canada*

Background: Pituitary adenomas, craniopharyngiomas and parasellar meningiomas are located adjacent to the mesial temporal lobes, orbital frontal lobes and the hypothalamus, which are areas important for the control of mood and cognitive functions such as problem solving, memory, attention, concentration and verbal expression. To date, no prospective studies have explored the cognitive and quality of life sequelae of radiotherapy primarily limited to the parasellar region.
Materials and Methods: 30 adult patients who were planned to receive fractionated stereotactic radiotherapy for the treatment of parasellar tumors were recruited from the Vancouver Cancer Centre between November 2001 and September 2003. Patients participated in serial neurobehavioural assessments on three occasions, within the week prior to radiotherapy, six months following the completion of radiotherapy and one year following the completion of radiotherapy. Assessments included self-reported measure of mood states; self-reported measures of quality of life (EORTC QLQ-C30 and the associated brain tumour module BCM 20); caregiver ratings of behaviour and activities of daily living and standardized clinical neuropsychological measures (attention/concentration, psychomotor speed, executive function and memory). A further assessment 3 years post treatment is currently underway.
Results: 29 patients were available for analysis. There were no significant differences in cognitive function, mood or quality of life at 6 months or 1 year compared to baseline testing ($p > 0.01$). Results will be available for the 3 year assessment when this is completed in May 2007.
Conclusion: This prospective study has demonstrated that fractionated stereotactic radiotherapy to tumours in the parasellar region does not result in any serious decline in cognition function, mood or quality of life within the first year post treatment.

2520 POSTER

Oral Temozolamide concurrent with radical radiotherapy for patients with glioblastoma multiforme: The University Hospitals of Leicester Experience

A. Gore, I. Boiangiu, R.P. Symonds. *University of Leicester Hospitals NHS Trust, Department of Oncology, Leicester, United Kingdom*

Purpose: To monitor outcome amongst patients with glioblastoma multiforme (GBM) receiving radiotherapy (RT) with concurrent Temozolamide and compare the results with data from published randomized control trial (by Stupp et al).
Materials and Methods: The results of the randomized controlled trial by Stupp et al presented at ASCO in 2004 and published in 2005 showed that patients with GBM treated with RT and concurrent and adjuvant Temozolamide have a better survival than those treated with RT alone. Due to lack of funding in our centre, we treated these patients with RT (60 Gy in 30 fractions over 6 weeks) and concurrent Temozolamide only (75 mg/m^2 daily for 42 days). A retrospective audit was carried out to monitor the outcome of patients with GBM treated in our centre with this regimen until June 2006. Data was collected from patient case notes, chemotherapy and radiotherapy prescriptions and computer database in our centre. Statistical analysis was carried out using SPSS package.
Results: 35 patients were identified (25 males, 10 females). Mean age was 58 years. 72% underwent craniotomy and debulking, whereas 29% had biopsy only. 33 patients received concurrent chemoradiation, of whom 27 patients (82%) completed the treatment. Significant toxicity due to chemotherapy was reported in only 15% of cases (mostly haematological) with one patient requiring dose reduction and 3 patients discontinuing the treatment. 70% of patients showed symptomatic improvement at six weeks following treatment. Although the mean time to progression was 4.3 months, the median survival was 9.5 months and 27% of patients were still alive at 20 months following diagnosis.
Conclusion: Even outside of clinical trials, the addition of Temozolamide concurrently to radiotherapy seems to be well tolerated with good compliance and acceptable toxicity similar to published data. Furthermore, long term survival can be achieved in a significant proportion of cases.
For patients with GBM radiotherapy with concurrent Temozolamide only appears to be a feasible and promising option with long term outcome comparable to published data and warrants further evaluation within clinical trials
However due to small sample size, the results need to be interpreted with caution.

2521 POSTER

Quality Assurance in the EORTC Low Grade Glioma Trial 22033–26033: the dummy run

E. Musat[1], B. Baumert[2], E. Roelofs[2], P.H. Poortmans[3], R. Bar-Deroma[4], R. Stupp[5], J.B. Davis[6]. *[1]EORTC Data Center, Medical Affairs Department, Brussels, Belgium; [2]Maastro – GROW University Hospital Maastricht, Radiation Oncology Department, Maastricht, The Netherlands; [3]Dr. Bernard Verbeeten Instituut, Radiotherapy Department, Tilburg, The Netherlands; [4]Rambam Medical Center, Radiation Oncology Department, Haifa, Israel; [5]University of Lausanne, Oncology Department, Lausanne, Switzerland; [6]University Hospital, Radiation Oncology, Zurich, Switzerland*

Purpose: To early detect deviations of radiotherapy (RT) in the ongoing EORTC22033–26033 trial on primary temozolomide (TMZ) vs RT in low grade gliomas after stratification for genetic 1p loss.
Materials and Methods: Performance of the dummy run (DR) is required once the first patients are randomized. A case of incomplete resected left frontal astrocytoma WHO II was proposed. DICOM-datasets (pre-, post-surgery MRI scans; planning CT-scan in treatment position) were made available online. DR consists of two parts: (1) Definition of the tumour, clinical and planning volume. Volumes were 3D reconstructed and evaluated; (2) After acceptance centres performed the RT plan. Target volumes were defined by 5 experts from 5 countries. Dmax to the organ at risk (OAR) should not exceed 10 Gy for retina and lens, 55 Gy for optic chiasm, optic nerves and the brainstem. Normal brain should receive less than 60% of dose. We analysed: target volumes, plan characteristics, PTV coverage, conformity index (CI)=PTV95%/PTV, PTV inhomogeneity (U) and Dmax to OAR by using DVH and isodose chart.
Results: 22 centres entered 77% of currently randomised patients and have finished most parts of the DR. We report on 20 case solution plans. Investigators volumes (size and anatomy) were compared against expert volumes. Two centres were requested to repeat GTV-PTV delineations due to major deviations. The majority of OAR were systematically contoured except the internal ear, lens, lacrimal gland and normal brain. All plans were 3D-conformal, used a commercial treatment planning system and isocentric technique according to ICRU50−62. For 5 plans dose was not prescribed at isocenter and not reported at the axe intersection in another 5 plans. Tissue heterogeneity corrections were not applied in 2 institutions. The majority used a 4(2−5) field set-up. Hot spots ranged:102%-109%. Conformity was good with CImean = 0.99(0.95−1) and Umean = 6%(4%-11%). Two sites had a major deviation in dose homogeneity and another two had a significant PTV under-dosage. Dmean to the normal brain was 18.6 Gy (12.5−28.4 Gy).
Conclusion: The majority of the centres planned RT in compliance with protocol requirements. Two centres needed to restart PTV delineation and a majority needed to add specific OAR. The advantage of DR at the beginning of trial is to give recommendations. The learning effect is expected to improve consistency between centres, improve radiation planning and volume definition and as such the reliability of the trial results.

2522 POSTER

Adult medulloblastoma: McGill experience

C. Ang[1], D. Hauerstock[2], M.C. Guiot[3], P. Kavan[4], T. Muanza[2], D. Roberge[2]. *[1]McGill University Health Centre-Montreal General Hospital, Internal Medicine, Montreal QC, Canada; [2]McGill University Health Centre-Montreal General Hospital, Radiation Oncology, Montreal QC, Canada; [3]Montreal Neurological Institute, Pathology, Montreal QC, Canada; [4]McGill University, Medical Oncology, Montreal QC, Canada*

Background: Medulloblastoma comprises about 15% of childhood neurologic malignancies but only accounts for 1−3% of such tumors in adults. Given that adult medulloblastoma is rare and an internationally recognized standard of care does not exist, we decided to review the demographics, management and survival data of patients treated and followed at the McGill University teaching hospitals over the past 18 years.
Methods: Medical records were investigated to identify eligible patients diagnosed with medulloblastoma over the age of 18. Retrospective clinical chart review was undertaken to gather data on patient demographics, presenting symptoms, tumor characteristics, treatment modalities and morbidity, relapse and survival.