Results: Data are available on 30 patients (12 female, 18 male; median age 28 years; range 17−48 years) treated and followed between January 1989 and February 2007. Three patients referred from outside institutions solely for the treatment of relapses were excluded from the survival analysis. Headache was the most common presenting symptom (76%) followed by nausea, vomiting, ataxia and gait disturbances (48%). Median symptom duration was 2 months. Seventy-four percent of lesions arose from the cerebellar hemispheres. Twenty-six patients were assigned to poor (46%) or standard (54%) risk categories. Of the twenty-seven patients treated and followed exclusively at McGill, twenty-five (93%) underwent surgical resection followed by craniospinal radiotherapy. The median time delay between surgery and initiation of radiotherapy was 35 days (range 11−75 days). Twelve (44%) patients were prescribed adjuvant chemotherapy using the CCG 921, POG 9031 or MOPP protocols. Five patients received vincristine concurrent with radiotherapy. The most frequently reported treatment-related adverse effects were myelotoxicity, ototoxicity and neuropathy. Twelve patients relapsed, most frequently in the posterior fossa (58%). Median time to relapse was 3.3 years (range 0.3−7.9 years). Median survival was 7.5 years. By February 2007, 10 patients were deceased. No treatment related deaths were reported.
Conclusion: Adult medulloblastoma is a rare disease for which the optimal management has yet to be defined. At McGill, pediatric chemotherapy protocols have been used to treat these patients and our overall survival data are comparable with pediatric data. By comparing our experience with that of other institutions we hope to improve the care provided to patients presenting with adult medulloblastoma.

2523 POSTER

Concomitant chemo radiation (CRT) in high-risk primitive CNS embryonal tumours (PCET): a prospective pilot study at Tata Memorial Hospital (TMH)

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Objective: The outcome of high risk PCET is dismal and novel approaches are urgently required. We present our preliminary observation of safety and feasibility of concomitant CRT in these patients.
Methods: Treatment naive patients with confirmed diagnoses of high risk PCET, >3 yrs & <22 yrs were prospectively accrued on this phase II study at TMH since July 2004. All patients underwent surgery followed by CRT within 6 wks of surgery The CRT includes craniospinal radiation (35 Gy/21#) with local tumour bed boost 19.8 Gy/11# along with carboplatin 35 mg/m^2/day given 5 days a week for 15 doses (during first 3 wks.). This was followed by 6 cycles of maintenance chemotherapy at 4 weekly interval beginning 4 to 6 wks post CRT using Vincristine, Carboplatin and Cyclophosphamide.
Results: A total of 17 patients have completed the CRT. Median age was 9 years (range 3−19 years), M:F ratio of 2:1 Medulloblastoma was seen in 59% and supratentorial PNET in 41%; M Stage M0 (53%), M1 (6%), M2 (6%), M3 (35%). All patients completed CRT as per schedule except interruption for 1 week in one patient due to facial cellulitis and another due to Malaria. In hematological toxicity 82% developed anemia, 94% developed neutropenia & 82% developed thrombocytopenia. Severe (Grade III/IV) anemia was observed in 19%, neutropenia in 62% and thrombocytopenia in 25% patients. In non hematological toxicity 94% patients had anorexia, 100% had nausea/ vomiting, 75% developed mucositis, 88% had radiation dermatitis and 94% had alopecia. Severe nonhematological toxicity included anorexia in 6%. A total of 62% patients required GCSF for > grade II neutropenia. Only 3 (20%) patients required RBC transfusion and one needed platelet support. None of the patients died of treatment related toxicity. At the end of CRT, 67% have achieved complete remission, 20% have good partial remission and remaining 13% have stable disease.
Conclusion: Concomitant CRT in PCET is feasible, safe, with manageable toxicities and can be given on out patient basis. We need to evaluate whether the promising early response translates in to long term benefit.

2524 POSTER

A treatment results comparison of: whole brain radiation therapy (WBRT), radiosurgery (SRS) and combination both method WBRT + SRS used for patients suffering from brain metastases

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Purpose: An evaluation of overall survival time (OST) of patients with brain metastases after 3 modalities treatment: whole brain radiotherapy – WBRT, radiosurgery – SRS and combination of both – WBRT + SRS and an assessment of some prognostic factors.
Materials and Methods: 200 patients (132 men and 68 women, age 31−74) suffering from brain metastases, treated with WBRT, SRS or WBRT + SRS between April 1998 and April 2004. 82 patients had solitary cerebral metastasis (subgroup 1), 70 patients – 2 to 3 metastases (subgroup 2) and 48 patients – 3 or more metastases (subgroup 3). In subgroup 1, 28 patients underwent WBRT, 41 patients SRS and 13 – WBRT + SRS. In subgroup 2, 28 – WBRT, 29 – SRS and 13 – WBRT + SRS. In subgroup 3, 48 patients had only WBRT.
The volume of solitary lesion was within the range from 0.5 cm^3 to 90 cm^3. SRS was performed using linear accelelator (dose ranged from 12 to 20 Gy) and WBRT was performed delivering five 4 Gy fractions. Median survivals were estimated using Weibull regression and Cox model.
Results: With the combination of the two methods – WBRT and SRS for subgroups 1 and 2 doubled OST was obtained in comparison to application one of these methods alone ($p = 0.003$). The influence of number metastases (1 vs more) on overall survival was confirmed ($p = 0.03$). The increase of tumor volume about 1 cm^3 enhanced failure risk of 1.2% (SD 0.54%). For solitary brain metastasis in capacity of $\leqslant$1 cm^3 and $\geqslant$10 cm^3 the statistically significant difference was obtained ($p = 0.05$). Survival of patients in subgroups 1 and 3 (aged <60 and $\geqslant$60) was statistically significant ($p = 0.02$).
Conclusion: The combination of both methods, WBRT + SRS, gives better results (survival) than these methods applied individually. The most important prognostic factors influence on OST of patients with brain metastases are: number and volume of metastases and age of patients.

Gastrointestinal Malignancies

Oral presentations (Tue, 25 Sep, 09.00−11.15)

Gastrointestinal malignancies – colorectal cancer (1)

3000 ORAL

Randomised phase III study of capecitabine, oxaliplatin and bevacizumab (CAPOX-B) with or without cetuximab in advanced colorectal cancer (ACC), the CAIRO2 study of the Dutch Colorectal Cancer Group (DCCG). An interim safety analysis

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Background: Cetuximab, a chimaeric Moab against the EGFR, has shown efficacy in ACC. However, no data are available on its combination with chemotherapy and bevacizumab (B) in 1st line. Recently a study with panitumumab, a human anti-EGFR, in combination with chemotherapy plus B was discontinued due to toxicity and decreased survival. We here present an interim safety analysis on a phase III study evaluating the efficacy of adding cetuximab to CAPOX-B.
Methods: 755 previously untreated ACC patients (pts) were randomised between CAPOX-B (arm A) and CAPOX-B plus cetuximab (arm B) between June 2005 and Dec 2006. Toxicity during the first 9 treatment cycles in the first 400 pts was evaluated.
Results: 381 pts were eligible and evaluable for toxicity (195 pts in arm A and 186 pts in arm B). The overall incidence of grade 3−4 toxicity in arms A and B was 66% and 76%, respectively ($p = 0.12$). Toxicity as the main reason for treatment discontinuation occurred in 65 pts (18%), 30 pts (15%) in arm A and 35 pts (19%) in arm B ($p = 0.70$). Grade 3−4 toxicities in arm A versus B were: hand–foot syndrome 12% vs 13% (grade 2: 14% vs 20%), diarrhoea 16% vs 23%, vomiting 7% vs 6%, febrile neutropenia 1% vs 0%, hypertension 4% vs 2%, cardiovascular events 4% vs 3% (myocardial ischemia 1% vs 2% and cerebrovascular ischemia 1% vs 0%), thromboembolic events 5% vs 7%, allergic reactions 3% vs 6%, and gastrointestinal perforations 2% vs 1%, with none of these differences