

for 5–6 weeks for a total dose of 50–60 Gy. Chemotherapy with Temozolomide was delivered concomitant with radiotherapy (75 mg/sqm/d \times 7 d/wk) followed by six cycles of adjuvant temozolomide (200 mg/sqm/d \times 5 days, every 28 days) in 21 patients. Adjuvant Temozolomide (200 mg/sqm/d \times 5 days, every 28 days) was delivered after three weeks from the radiotherapy to 30 patients and to 9 patients with relapse after radiotherapy with curative intent.

Results: Concomitant Temozolomide with RT+ adjuvant TMZ was followed by 5 partial responses, 8 stable diseases, 14 patients were free of disease three month after completion of treatment and 3 patients with progressive disease. For patients with Temozolomide adjuvant to RT we obtained 3 partial responses, 12 stable disease, 1 patient with progressive disease and 5 patients were free of disease. Median survival was 13 months for patients with concomitant treatment, and 6.5 months for patients with adjuvant treatment. The main toxicities were: grade 1 and 2 nausea and vomiting in 12 patients, grade 2 thrombocytopenia in 6 patients, grade 3 skin toxicity in 2 patients and obstipation in 7 patients.

Conclusion: Combined radiotherapy and Temozolomide, for high-grade gliomas, concomitant or adjuvant, is feasible with acceptable toxicities and good compliance. This protocol may prolong the disease free interval and possible the survival of patients with high-grade gliomas.

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PUBLICATION

Concomitant radio-chemotherapy with temozolomide in malignant gliomas

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Background: Malignant gliomas are highly aggressive tumors with frequent relapse after surgery and no effective treatment at this time. In our study we assess the efficacy of concomitant radiotherapy and temozolomide in multiform glioblastoma treatment.

Patients and methods: Between June 2002–June 2003 12 patients have been treated after optimal surgery for glioblastoma multiforme. Median age was 48 years (range 39–60 years). Sex ratio male/female was 2:1. Treatment schedule was: external radiotherapy up to 60 Gy, in the target volume, conventional fractionation 30 \times 200 cGy 6 weeks and Temozolomide: 150 mg/m²/day, days 8–12 and 36–40, concomitant with RT followed by 6 more cycles with Temozolomide 200 mg/m²/day, days 1–5, repeated at 28 days.

Results: Haematological toxicity was grade 3 leucopenia 2 patients, grade 3 anemia 1 patient and grade 3 thrombocytopenia 1 patient, no grade 4 toxicity. Nonhaematological toxicity: fatigability grade 1–2 in 4 patients, grade 3–4 in 1 patient, rash grade 1–2 in 2 patients, grade 3–4 in 1 patient, nausea grade 1–2 in 4 patients, grade 3–4 in 1 patient. Median survival was 16.5 months; 8 patients are alive after 1 year (6 of them free of disease) and free of disease median survival was 7.8 months.

Conclusions: The treatment scheme has been well tolerated. Results are slightly better than those with postoperative RT alone and are similar to those reported in other studies or with daily administration (50–75 mg/m²/day for 6 weeks). Further investigation is required.

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PUBLICATION

The effect of a tumour board on the prognosis of patients with brain metastases treated using radiosurgery

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Purpose: To analyse prognostic factors and classification schemes for patients with brain metastases selected by a tumour board for stereotactic radiosurgery (SRS).

Materials and methods: From June 1997 to December 2004, 69 patients with 1–3 brain metastases received SRS, most as a boost after 30 Gy/10 whole brain radiotherapy (WBRT), and some as salvage after craniotomy and/or 20 Gy/5 WBRT. Twenty-six patients had lung, 17 had breast, and 26 had other histologies. The largest lesion per patient had a median diameter of 20 mm (3–31). The patients had a median age of 56 (35–78) and a median ECOG-PS of 1 (0–3). A median dose of 18 Gy (13.5–24) was prescribed to the 80% isodose surface. For each patient, the RTOG recursive partitioning analysis class (RPA), score index for radiosurgery in brain metastasis (SIR), and the basic score for brain metastasis (BS-BM) were determined.

Results: For the entire cohort, the median survival was 12.0 months, and univariate Cox regression of age, KPS, ECOG-PS, Lesion Number, Lesion Volume, Primary Control, Extra-cranial Metastases, Histology, RPA, SIR, and BS-BM determined that only younger Age ($p=0.003$) predicted

for better survival. For the subset that excluded the 3 outlying patients with survival >36 months, the median survival was also 12.0 months. In this subset, univariate Cox regression demonstrated that younger Age ($p=0.009$), better ECOG-PS ($p=0.001$) and, unexpectedly, higher Lesion Number ($p=0.01$) predicted for better survival. Multivariate Cox regression determined that younger Age ($p=0.045$) and better ECOG-PS ($p=0.01$) predicted for better survival.

Conclusions: For this cohort of patients with brain metastases, selected for radiosurgery by a tumour board, the median survival compared favourably with other reports; however, RPA class, BS-BM and SIR did not predict for patient survival. Patients with fewer lesions had a significantly poorer survival than those with more lesions, suggesting that the tumour board exerted selection pressure, altering the usual influence of known prognostic factors in this cohort.

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PUBLICATION

The role of age for survival in high grade glial tumors

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Purpose: In this retrospective study we analyzed the results of radiotherapy in patients with surgically removed high grade brain tumors treated with postoperative radiotherapy (RT).

Materials and methods: Between July 1999 and December 2004, 53 patients (28 male, 25 female) were treated in our department. Median age of the patients was 52 (18–75) years. Seven patients had a total surgical resection, 30 near total resection, and 14 subtotal resection. In 2 patients, diagnosis was based upon clinical and radiological data. The pathology was consistent with grade III astrocytoma in 12 (22.6%) and glioblastoma multiforme in 41 (77.4%) patients. At the time of diagnosis 21 (39.6%) patients had \leq 70 karnofsky performance status and 10 (19%) had history of seizure. Adjuvant RT was given with a single daily fraction of 1.8 Gy to a total dose of 63 Gy. The median interval between surgery and radiotherapy (RT) was 37 days and RT was completed in median 49 days. Twenty-eight (52.8%) patients received chemotherapy after completion of RT for this study, the prognostic importance of age, sex, performance status, a history of seizure at diagnosis, extent of surgery for overall survival were analyzed. Mean follow-up period was 15 (2–64) months.

Results: The median overall survival was 25 months. Fourteen patients are alive without any recurrence. More than 50 years of age was the only significant factor in univariate analysis and there were no significant factors in multivariate analysis for overall survival.

Conclusion: This study concluded that more than 50 years of age was a poor prognostic factor in glioblastoma multiforme.

Clinical Trials Methodology and Ethics

Poster presentations (Wed, 2 Nov)

Clinical trials methodology and ethics

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POSTER

Impact of the new European regulation on the authorisation of new oncology drugs in the European Union (EU)

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On 20 November 2005, new European pharmaceutical legislation will enter into force. Thereafter, all oncology drugs seeking approval in the EU will be evaluated via the European Medicines Agency (EMA) leading to an EU-wide approval. This review focuses on the main regulatory changes related to the centralized procedure and the new concepts for approval that may affect applications for oncology products.

Regulation (EC) No. 726/2004 introduces new tools and procedures allowing early access to new drugs, including anticancer drugs. One of these measures is the 150 days accelerated procedure (instead of 210 days) for drugs that are of major public health interest, particularly in terms of therapeutic innovation. Moreover, renewable conditional authorisations may be granted for certain products pending completion of further studies (detailed implementing legislation is expected to be adopted by the time of reporting). The existing mechanism of approval under exceptional circumstances when the rarity of the indication, the state of the scientific knowledge or the principles of medical ethic do not allow to provide