Central nervous system 501

Conclusion: IL-2 in combination with polychemotherapy has immunomodulating effect, which considerably affects clinical effectiveness, allowing to decrease the frequency of infectious complications.

8725 POSTER

The safety and efficacy of intrathecal liposomal cytarabine in patients with carcinomatous meningitis from solid tumours

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Background: The purpose was to assess the efficacy and safety of liposomal cytarabine (LC) in the treatment of *de novo* carcinomatous meningitis from solid tumours.

Materials and Methods: From 2005-2008, unselected, sequential patients with solid tumours and de novo leptomeningeal involvement at 3 different Spanish institutions were offered treatment with intrathecal LC, subject to Spanish Ministry of Health approval (n = 16; 9 men, 7 women). None had previously received LC. The diagnosis was confirmed by cytology (n = 13), MRI (n=10) and/or CT scan (n=7). The LC treatment regimen was: (induction) 1×50 mg every 14 days (2 doses total), then (consolidation) 1×50 mg every 14 days (3 doses total), then (maintenance) 1×50 mg every 28 days (5 doses total). All patients received concomitant steroids as prophylaxis against arachnoiditis. Three also received concurrent systemic chemotherapy (2 concomitant, 1 sequential). Neurological response was defined as follows: Complete response (CR), improvement of all neurological symptoms; Partial response (PR), improvement of ≥50% of neurological symptoms for ≥2 weeks; Stable disease (SD), neurological symptoms unchanged; Progressive disease (PD), neurological symptoms progressed or proliferating. Cytological response (absence of malignant cells in the CSF) was assessed at the time of lumbar puncture for LC in patients who presented with positive cytology, and who received >1 dose

Results: Patients had a median age of 49 years (range 26–60) and a median follow-up of 42.5 days (range 4–414). All but 1 had undergone previous systemic chemotherapy, and 10 had also received previous radiotherapy. Primary tumours were: breast cancer 7, lung cancer 3, other tumours 6. The median number of LC doses received was 1 (range 1–6). A neurological CR was seen in 5 patients, a PR in 3, SD in 2, and PD in 7. A cytological response was sought in 5 and confirmed in 4, at 14, 19, 28, and 42 days, respectively. Median time to neurological progression or death was 14 days (range 0–170). Adverse effects were reported in 10/16 patients, but none was grade 4. The most frequently reported adverse effect was headache (6/16 patients).

Conclusions: In the largest European case series report to date to evaluate the efficacy and safety of LC in patients with carcinomatous meningitis from solid tumours, LC was generally well tolerated and efficacious. LC reduces the number of IT injections compared to conventional therapy, which should improve quality of life.

8726 POSTER

Clinical pattern of primary central nervous system lymphoma in a developing country

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Primary Central Nervous System (CNS) lymphoma is a rare entity. We wish to present our experience with this rare tumor.

Aim: To study the pattern of presentation and treatment results of Primary CNS Lymphoma from a single Institute in a developing country. Materialand Methods: Thirty patients with a diagnosis of Primary CNS lymphoma were treated at Regional Cancer Centre, Trivandrum, India during the period 2000-2007. The case records of these patients were studied in detail with respect to their presentation, treatment and survival. Results: Of the 30 patients, there were 18 males and 12 females. Their age ranged from 26 years to 76 yrs with a median age of 50 years. The main presentation was with features of raised intracranial tension and hemiparesis. The symptoms were present for a median period of 3 months. The pathologic subtype was predominantly Diffuse large B cell NHL in 26 patients, Burkitt lymphoma in 3 cases and diffuse small cell in 1. The main sites of involvement were frontal lobe, parietal lobe, frontopariental, temporal lobe, cerebellum and thalamus. Sixteen patients had undergone decompression. Fifteen patients received chemotherapy, of which 9 received single agent High dose Methotrexate, 5 patients received De Angeles protocol. Radiotherapy was given in 23 patients and the dose

ranged from $45-55\,\mathrm{Gy}$. At 2 years 10 patients were alive disease free and the longest survival was 90 months.

Conclusion: Primary CNS lymphoma a rare CNS tumor, is mostly large B cell subtype and requires multimodality management for disease free supplied.

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Outcome after high-dose methotrexate and radiotherapy for primary central nervous system lymphoma

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Background: To evaluate the outcome of patients with primary central nervous system lymphoma (PCNSL) after high-dose methotrexate (HDMTX)-based chemotherapy and radiotherapy (RT) and to identify prognostic factors for survival in this population.

Materials and Methods: Between March 2000 and July 2007, 43 patients with pathologically proven PCNSL received HDMTX based chemotherapy in conjunction with radiotherapy. HDMTX (2.5 g/m²)-based chemotherapy was given in multiple cycles (median 5 cycle) at before or after RT. All the patients received whole brain irradiation (WBI), followed by boost to tumor bed. As for WBI, 25 patients were treated with reduced dose (median 30.6 Gy; range, 23.4–30.6 Gy) and 18 patients with average dose (median 36 Gy; range, 36–48.8 Gy).

Results: The median age was 55 years (range, 25–75 years) and the patients with poor performance status (PS) of 2 or higher on ECOG scale were 15. At a median follow-up of 26 months (range, 7–146 months), the median progression-free survival was 31 months and the median overall survival (OS) was 59 months. The 2- and 5- years overall survival (OS) was 68.62% \pm 0.8% and 42.6% \pm 0.9%. The old age (>50 years) and poor performance (ECOG \geqslant 2) were associated with poor OS by univariate and multivariate analysis. There was no difference in survival and intracranial control between reduced and average dose WBI. (ρ = 0.7808 and ρ = 0.2458, respectively). Although marginally significant (ρ = 0.0645), the delayed neurologic toxicity of patients with reduced dose WBI were lesser compared with those with average dose WBI.

Conclusion: Reduced dose WBI could diminish the risk of treatmentrelated neurotoxicity without compromising survival in patients treated with HD-MTX based chemotherapy for PCNSL. In patients received HDMTX based chemotherapy, appropriate dose of WBI have to be further investigated in prospective trials.

8728 POSTER

The impact of the histology of primary tumor on RPA prognostic classifications in patients (pts) treated for brain metastases (BM) – retrospective analysis of 382 pts treated with hypofractionated whole brain radiotherapy (HWBRT)

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Background: The survival of patients with BM is strongly related to clinical prognostic factors included in the Recursive Partitioning Analysis (RPA) classes. [1] Histology of the primary tumor is not included in the RPA prognostic classes and it is unclear whether it influences survival. The aim of the study was to evaluate the impact of histology on the survival of BM patients among different RPA classes.

Materials and Methods: We performed a retrospective analysis of 382 pts with BM treated at our Institution between January 1995 and April 2008. 31%, 48% and 21% of them were respectively in RPA classes 1, 2 and 3. All were treated with HWBRT, 17% with the addition of surgery and adjuvant HWBRT. Radiotherapy doses were 30 Gy in 204 pts (53%) and 20 Gy in the remaining. The primary tumours were: breast cancer 87 pts (23%), lung adenocarcinoma 143 pts (37%), small cell lung cancer 42 pts (11%), kidney 14 pts (4%), melanoma 20 pts (5%), GE cancer 19 pts (5%), ovary/uterus 8 pts (2%), others 8 pts (2%), unknown 9 pts (2%), classified in broad categories in order to submit to statistical analysis larger groups. Uni- and multivariate analysis were performed.

Results: After a median follow-up of 146 days, the actuarial 1 year overall survival is 24%. Median survival in patients in RPA 1, 2 and 3 is respectively 269, 142 and 64 days (p = 0.0000). At univariate analysis the histology of primary tumor has a significant impact on median overall survival (OS) in each RPA class as shown in the following Table.