study is underway to determine the tolerability and outcome of this maintenance regime.

4130 POSTER

Radiotherapy in paediatric central nervous system tumours: analysis of referral patterns and patient profile

S. Goyal[1], S. Muzumder[1], D.N. Sharma[1], P.K. Julka[1], G.K. Rath[1]. [1]*All India Institute of Medical Sciences, Radiotherapy, New Delhi, India*

Background: To study the profile of paediatric central nervous system (CNS) tumours referred for radiotherapy (RT).
Materials & Methods: We reviewed records of 183 patients (pts) <20 years seen at our department (2003–2008) & noted demographic & treatment details.
Results: Median age was 10 years (range 2−20) & male:female ratio 2.2. Median symptom duration was 4 months (range 0.25−84) & included headache (72.1%), vision loss (33.9%), ataxia (29%), cranial nerve palsies (27.9%), limb weakness (15.3%), seizures (14.8%), endocrine dysfunction (4.4%) & bladder/bowel incontinence (3.3%). Brain imaging included MRI (86.9%) or CT scan (13.1%). Tumour location was supratentorial (50.8%), infratentorial (45.4%) or spinal (2.7%). Spine was involved on MRI (8) or CSF cytology (2) in 10 brain tumours. Surgery was done in 152 pts (76.9% internal, 23.1% external referrals): gross total (49), near total (33), decompression (65) or biopsy (5). Diagnosis was histological [glioma (low grade 40, high grade 17), medulloblastoma/primitive neuroectodermal tumor (PNET) 46, craniopharyngioma 16, ependymoma 13, germinoma 5, others 15] or radiological [glioma (brainstem 24, thalamus 4, optic nerve 1), PNET 2]. Residual disease on postoperative imaging (n = 108) was absent (30.6%), $\leqslant$1.5 cc (14.8%) or >1.5 cc (54.6%). Median diagnosis to RT referral time was 22 days (range 0–438). Median waiting time for RT was 38 days. RT was given for primary disease (75.4%), postoperative residual (16.9%) or recurrence (7.7%); RT volume being focal (70.5%), craniospinal (26.8%) or whole brain (2.7%). RT intent was curative (98.4%, dose range 50−60.04 Gy, median 56 Gy) or palliative (1.6%, dose range 5−20 Gy), with 97.8% compliance. Median RT duration was 43 days (range 1−88 days); 88.8% completed RT in $\leqslant$50 days. Chemotherapy was given to 81 pts (median 6 cycles, range 1−12), common regimes were carboplatin-etoposide (42), temozolomide (20) or bleomycin-etoposide-cisplatin (5). Post-therapy, 80 achieved complete remission, of which 12 relapsed (7 local, 5 spine). Salvage therapy given to 9 pts included chemotherapy (7), surgery (1) or RT (1). At a median follow up of 10.36 months, 74 (40.4%) were disease-free, 56 (30.6%) were alive with disease, 1 (0.5%) was dead; status was unavailable for 28.5% (on therapy or lost to follow up).
Conclusion: RT is an integral & effective management component in many common paediatric CNS tumours. However, referral & waiting times need reduction for maximal benefit.

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The result of ICE chemotherapy as first line therapy in adolescent germ cell tumour – experience from India

S. Das[1], K. Mukherjee[2], J. Basak[3], S. Mukhopadhyay[4], L. Konar[5], A. Mukhopadhyay[1]. [1]*Netaji Subhas Chandra Bose Cancer Research Institute, Medical Oncology, Calcutta, India;* [2]*Netaji Subhas Chandra Bose Cancer Research Institute, Epidemiology, Calcutta, India;* [3]*Netaji Subhas Chandra Bose Cancer Research Institute, Molecular Biology, Calcutta, India;* [4]*Netaji Subhas Chandra Bose Cancer Research Institute, Biochemistry, Calcutta, India;* [5]*Netaji Subhas Chandra Bose Cancer Research Institute, OPD and Epidemiology, Calcutta, India*

Background: Tumors of germ cell origin account for approximately 2% to 3% of childhood malignancies. The primary chemotherapy approach in patients with stage II and III disease combined with limited surgery with or without radiotherapy has been effective in paediatric cases. This approach has the advantage of preserving as much reproductive and endocrine function as possible without compromising long term survival. The aim of our study was to see the effect of ICE chemotherapy as first line therapy in adolescent germ cell tumour.
Materials & Methods: During the period from January 2005 to December 2008 we selected consecutive 45 cases of adolescent germ cell tumour in the paediatric oncology department of Netaji Subhash Chandra Bose Cancer Research Institute. The age range of the patient was from 12 to 18 years (median age 14.8 years). There were 27 females (60%) & 18 males (40%). All patients were started with ICE chemotherapy every 3 weekly for 6courses. ICE consisted of Iphosphomide 2 mg/m^2 day 1 to day 5, Etopside 100 mg/m^2 day 1 to day 5 & Cisplatin 20 mg/m^2 day 1 to day 5. The response evaluation was done in the following criteria, complete response was defined when there was total disappearance of the mass, major response was defined when there was more than 75% disappearance of the mass, partial response was defined when there was less than 50% reduction of the mass.
Result: After 4 courses of chemotherapy 30 patients (67%) had complete disappearance of the tumour. Eight patients (18%) had major response; other 7 patients (16%) had partial response. For those patients in major response, two more chemotherapy was considered. Surgery was advised to those patients with partial response. The patient tolerated ICE chemotherapy well. Grade III or IV neutropenia was seen in 9 patients (20%) only.
Conclusion: ICE chemotherapy is very useful combination chemotherapy in adolescent germ cell tumour. It is well tolerated by the patients.

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The treatment results of patients with Non-Hodgkin Lymphoma followed by pediatric oncology clinic in Cukurova region in Adana

S. Yilmaz[1], I. Bayram[1], F. Erbey[1], M. Ergin[2], A. Tanyeli[1]. [1]*Çukurova University Medical Faculty, Pediatric Oncology, Adana, Turkey;* [2]*Çukurova University Medical Faculty, Pathology, Adana, Turkey*

Background: To investigate the treatment results of patients with Non-Hodgkin lymphoma.
The third most common cancer in children <15 years of age is lymphoma which is accounted for 10−15% of childhood cancers. Non-Hodgkin lymphoma (NHL) is a malignant disease of lymphoid system. As a result of prolipheration of lymphocytes metastatic involvement, including BM, CNS and/or bone occurs.
Material and Methods: We investigated 82 patients diagnosed with NHL in between June 1996 and January 2009. Cases included 23 (28%) girls and 59 (72%) boys. Mean age was 81.5$\pm$44.6 (8–205) months.
Results: 53 (64.6%) of patients were Burkitt lymphoma, 18 (22%) were lymphoblastic lymphoma, seven (8.5%) was diffuse large B cell lymphoma, three (3.7%) was anaplastic large cell lymphoma and one (1.2%) was maltoma. While one of these cases (1.2%) was stage I, 12 (14.6%), 41 (50%) and 28 (34.2%) of patients were stage II, III and IV, respectively. 61 (74.4%) of NHLs were presented in the abdomen. Nine (13.4%) of which was located in the thorax and 9 (13.4%) of which was in the head and neck. Other locations were skin (one) and central nervous system (two). One case with unknown origin was disseminated. Pleural effusion, bone marrow infiltration and ascites were found in 16 (19.5%), 16 (19.5%) and 9 (13.4%) of patients, respectively. 61 (74.4%) of cases were diagnosed with mass biopsy. NHL was diagnosed in totally and partially resected mass in 13 (15.9%) and 8 (9.7%) of cases operated with the findings of intestinal obstruction or suspicion of appendicitis, respectively. 64 (78%) of cases received BFM-90 and 18 (22%) were given LSA_2L_2 treatment protocol. We found five-year overall survival of 74% and event-free survival of 70%.
Conclusion: Although patients with NHL were reported as stage III-IV and histopatologically as Burkitt lymphoma in our clinic, the treatment results correlated with recent literatures.

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Evaluation of stressors intensity in parents of children with leukemia

M. Golchin[1], H. Bahrami[1], P. Bahrami[1]. [1]*Isfahan University of Medical Sciences, School of Nursing and Midwifery – Pediatrics group, Esfahan, Iran*

Background: Childhood malignancies affects family members specially parents with stress and distress. Nurses can recognize stressors and provide effective interventions for these kinds of family problem. So a study is done with the Purpose of determination severity of psychological, social and related to child stressors in parents of children with leukemia And in comparison with each other.
Materials and Methods: Convenient sampling is done as a descriptive-analytical study. Parents (both) of 45 children suffering from leukemia filled out questionnaire. Questionnaire evaluated parents for social, psychological and related to child stressors. Data were analyzed by t test and spss. Validity & reliability of questionnaire was done by content validity and test re test.
Results: Based on scores delivered the most important stressors including:

A. Important related to child stressors were observing the child in pain for fathers (89.2%) and mothers (100%), observing intramuscular, intravenous and intratechal injections for diagnosis and treatment, fear of death of child and also think of separation during periodical hospitalization (96%) by mothers, and fear of child death (83.7%) and disease recurrence (87.8%) by fathers.
B. Important social stressors were: problem of drug unavailability for fathers (79.7%) and mothers (82.4%), lack of ability to provide life comfort for other children due to illness in this patient (77%) for mothers, and lack of ability to provide treatment and care expense (62.2%) for fathers.