List of publications 2009


Rectal carcinoma metastasizing to the breast: A case report and review of literature

Abstracts:-

Extramammary breast metastases (from non-breast primaries) are rare, constituting only about 2% of all breast metastases, although autopsy studies show that it may occur in up to 6% of cases. Lymphoma, metastatic melanoma, and bronchial carcinoma are the malignancies that account for the majority of breast metastases. Breast metastases from a colorectal carcinoma have been described in only a small number of cases in the literature. We present a case of a 42-year-old woman with an incidental finding of a breast lump. She had a history of Dukes C rectal carcinoma for which she had undergone an anterior resection 11 months earlier. The breast deposit was the first clinical indication of relapse. The patient subsequently developed liver and brain metastases and deteriorated rapidly; she died 2 months after presenting with the breast mass.

Keywords: Breast metastasis, immunohistochemistry, rectal carcinoma


Fetal rhabdomyoma of the lower extremity

Abstracts:-

Abstract

We report a rare case of cellular fetal rhabdomyoma in a 9-year-old male, in the unusual location of right lower thigh. These tumors are more common in the head and neck region; and this case the second such case to be reported in the thigh. Fetal rhabdomyoma is a benign tumor of the skeletal muscle, showing varying degrees of skeletal muscle maturation. The present report discusses the histopathological features, the differential diagnosis and the importance of making the correct diagnosis for proper management of this rare entity. Pediatr Blood Cancer 2009;52:881–883. © 2009 Wiley-Liss, Inc.

Cognitive assessment of children with acute lymphoblastic leukemia: Preliminary findings

Abstracts:

Abstract: initiation of treatment since prospective longitudinal research in this area on the Indian population has not been adequately documented. Unlike many western studies that have targeted survivors of ALL, we aimed to bring out the cognitive outcome after initiation of treatment.


Current status of gynecological cancer care in India

Abstracts:

The cognitive functions of 19 patients diagnosed to have ALL were assessed using standardized tests after induction chemotherapy, and periodically thereafter following the second course of treatment comprising central nervous system-directed radiotherapy, and chemotherapy using intrathecal methotrexate.

5) Tejinder Singh1, CS Premalatha2, CT Satheesh1, KC Lakshmaiah1, TM Suresh1, K Govind Babu1, C Ramachandra3


Rectal carcinoma metastasizing to the breast: A case report and review of literature

Abstracts:

The study found a statistically significant decline in the intelligence quotient and a deficit in the cognitive function of analytical reasoning.

6) Latha fathiam premalatha DOI: 10.1002/pbc.21928PMID: 19165887 Pediatric blood andcancer 2009 january

Fetal rhabdomyoma of the lower extremity

Abstracts:

We report a rare case of cellular fetal rhabdomyoma in a 9-year-old male, in the unusual location of right lower thigh. These tumors are more common in the head and neck region; and this case the second such case to be reported in the thigh. Fetal rhabdomyoma is a benign tumor of the skeletal muscle, showing varying degrees of skeletal muscle maturation. The present report discusses the histopathological features, the differential diagnosis and the importance of making the correct diagnosis for proper management of this rare entity. Pediatr Blood Cancer 2009;52:881–883. © 2009 Wiley-Liss, Inc.

7) Tejinder Singh1, CT Satheesh1, DS Madhumathi2, Mukul Goyal1, LK Rajeev1, KC Lakshmaiah1, TM Suresh1, K Govind Babu1 DOI: 10.4103/0973-1482.57133 Journal of cancer research and therapeutics 2009 october

Turbid serum in a patient of acute lymphoblastic leukemia on treatment-What to look for?

Abstracts:

A 42-year-old male patient presented with a 1-month history of dyspnea and neck swelling. On examination, he was normotensive and had bilateral cervical lymphadenopathy with distension of neck veins suggestive of superior vena cava syndrome. An abdominal examination revealed hepatosplenomegaly. Computed tomography (CT) of the thorax and abdomen showed a large mediastinal tumor, thoracic and abdominal lymphadenopathy, and hepatosplenomegaly. Biopsy of the mediastinal tumor revealed a T-cell lymphoblastic lymphoma. The results of bone marrow aspiration were suggestive of acute lymphoblastic leukemia (ALL) [Figure 2] and [Figure 3], and a lumbar puncture was normal. His hemogram revealed Hb 12.4 g/dl, WBC 8,000 u/L, and a platelet count 200,000 u/L. Serum biochemistry including random blood sugar and lipid profile was normal. The family history was negative for dyslipidemia or premature coronary heart disease.
Remission induction therapy according to the GMALL protocol was initiated. [1] The patient was started on vincristine, daunomycin on days 1, 8, 15, and 22, and prednisolone on days 1-28. l-asparaginase was administered at a dose of 6,000 IU/m² for days 15-28 on every other day. The patient also received CNS prophylaxis with intrathecal methotrexate on day 1. He tolerated chemotherapy well, and laboratory parameters like hemogram and biochemistry were determined during the remission induction therapy regularly. On day 28, prednisolone was tapered and on day 30, he started complaining of headache, bodyache, and fever. Random blood sugar was 120 mg/dL. In view of turbid blood, lipid profile was done. Serum triglyceride level was very high (>13,000 mg/dl). In addition, an increased level of cholesterol of 1200 mg/dL and elevated liver function parameters (bilirubin 1.4 mg/dL, alkaline phosphatase 670 mg/dL, aspartate aminotransferase 940 U/L, alanine aminotransferase 110 U/L, α-glutamyltransferase 940 U/L, and lactate dehydrogenase 700 U/L) were detected. The serum values of pancreatic enzymes (amylase and lipase) were within the normal ranges. Fundi did not show lipemia retinalis. Ultrasound of the abdomen showed no fatty infiltration of liver. A lipolytic therapy with insulin (continuous infusion for 6 days) and atorvastatin 20 mg was initiated and resulted in a prompt and continuous decrease in the liver function test results and serum lipid levels. The patient was discharged from the hospital on day 52 and his serum cholesterol and triglycerides were normal.

8) Venkata Satya Suresh Attili¹, C Obula Reddy² DOI: 10.4103/0974-2727.54804 PMID: 21938246

Journal of Laboratory Physicians 2009 July National

An interesting case of lung mass
Abstracts:

A 46-year-old male smoker presented with cough and fever to a chest physician, who on the basis of chest X-ray started him on antitubercular treatment. However, further evaluation suggested that the patient was suffering from a rare disease, i.e. Anaplastic large cell lymphoma of lung. Although lung involvement in cases of lymphoma is observed in as high as 40% of cases, in autopsy series, the exact clinical incidence is not known. One of the largest lymphoma groups reported it to be around 25%. However, primary pulmonary lymphomas have been extremely rare (0.4%), and whenever present they are of (Mucosa Associate Lymphoid tissue) MALT type, with occasional diffuse large cell lymphomas. The anaplastic variant is extremely uncommon. Usually the treatment results are satisfactory with more than 80% of the cases surviving even after 5 years. Here we report the case of anaplastic primary nonHodgkin's lymphoma of lung and review the literature.

9) Anna Abraham and L. Appaji Ind Jou of Med Pediatric Oncology 30 (1) 14-19 Indian Journal of Medical Pediatric Oncology 2009 Jan

Cognitive assessment of children with acute lymphoblastic leukemia: Preliminary findings
Abstracts:

The objective of this study was to assess the cognitive functions of Indian children with acute lymphoblastic leukemia (ALL), periodically after initiation of treatment since prospective longitudinal research in this area on the Indian population has not been adequately documented. Unlike many western studies that have targeted

10) M N Sadananda Adiga, Sunil Chandy, Girija Ramaswamy, L Appaji, B S Aruna Kumari, Lakshmi Krishnamoorthy


Association between plasma homocysteine and riboflavin status in Acute Lymphoblastic Leukemia in children

Abstracts:

Remethylation of homocysteine to methionine is dependent on an adequate supply of one or more of the B vitamins like folate, vitamin B(12) and vitamin B(6). Plasma total homocysteine (tHcy) is also influenced by genetic factors such as polymorphisms in the methylenetetrahydrofolate reductase (MTHFR) gene. MTHFR is a flavo enzyme and a key player in folate metabolism and changes in its activity could modify the susceptibility to Acute Lymphoblastic Leukemia (ALL). In this case-control study we have examined the effect of riboflavin status as measured by erythrocyte glutathione reductase activation coefficient (EGRAC) on homocysteine levels along with vitamin B(12) and folate in pediatric ALL. Folate and B(12) levels were significantly lower among cases as compared to controls while EGRAC and tHcy did not differ significantly among the groups. The multivariate regression analysis revealed that in the ALL group EGRAC significantly influences tHcy levels suggesting that riboflavin availability may be a predictor of tHcy levels in patients with ALL. This finding may have implications for tHcy lowering therapy.
11) Tejinder Singhi, CS Premalatha2, CT Satheesh1, KC Lakshmaiah1, TM Suresh1, K Govind Babu1, C Ramachandra3
Journal of cancer Research and therapeutics National 2009 February

Rectal carcinoma metastasizing to the breast: A case report and review of literature

Abstracts:

Extramammary breast metastases (from non-breast primaries) are rare, constituting only about 2% of all breast metastases, although autopsy studies show that it may occur in up to 6% of cases. Lymphoma, metastatic melanoma, and bronchial carcinoma are the malignancies that account for the majority of breast metastases. Breast metastases from a colorectal carcinoma have been described in only a small number of cases in the literature. We present a case of a 42-year-old woman with an incidental finding of a breast lump. She had a history of Dukes C rectal carcinoma for which she had undergone an anterior resection 11 months earlier. The breast deposit was the first clinical indication of relapse. The patient subsequently developed liver and brain metastases and deteriorated rapidly; she died 2 months after presenting with the breast mass.

Keywords: Breast metastasis, immunohistochemistry, rectal carcinoma

12) Joseph BINDHU, Sanjay SUPE, Yeshwanth PAWAR

Reports of Practical Oncology & Radiotherapy DOI:10.1016/S1507-1367(10)60101-0 pp.95-103 science Direct Reports of Practical oncology Radiotherapy National 2009 may

Intensity modulated radiotherapy (IMRT) the white, black and grey: a clinical perspective

Abstracts:

The radiotherapy community has in the past few decades witnessed dramatic shift in the treatment modalities from conventional 2-D radiotherapy to the now widely practiced 3-D CRT, IMRT and evolving IGRT. IMRT has generated so much interest because of its unique dosimetric modulation to concentrate doses to the targets of interests while also being able to relatively spare neighboring normal tissue. However IMRT is not the all in one solution for radiotherapeutic management of solid malignancies. The current enthusiasm in IMRT must be tempered with an understanding of the complexities of IMRT planning, treatment delivery, quality assurance, monitoring and clinical limitations. The widespread implementation of this technological innovation may have been a bit premature considering that clinical information regarding the same is still being generated. This article tries to give an overview of the potential advantages/disadvantages of IMRT in the clinical set up and the few controversies (Grey Zone) that are still being resolved. There is evidence to indicate that indiscriminately used IMRT may even harm the patient or have an inferior therapeutic index to 3DCRT. This and other pertinent issues will be covered by the authors in this short review of IMRT in clinical practice.


Darier-Roussy Sarcoïdosis Mimicking Metastatic Breast Cancer

Abstracts:

Subcutaneous sarcoïdosis (also known as 'Darier-Roussy sarcoïd') is a cutaneous condition characterized by numerous deep-seated nodules on the trunk and extremities. Coexistence of sarcoïdosis and breast cancer are reported in the literature, but there will always be a chance of misdiagnosis. It is very crucial to obtain a tissue diagnosis of suspicious metastatic lesions. We report a case of breast cancer presenting with a subcutaneous sarcoïd lesion masquerading as a metastatic lesion. A 50-year-old female patient, who had had cancer of the left breast, was on hormone therapy 2 years after treatment with surgery, radiotherapy and chemotherapy. The patient presented with a sudden onset of a forehead subcutaneous swelling mimicking metastasis which on excision biopsy was proved to be sarcoïdosis. In India, sarcoïdosis is reported rarely. We have to keep in mind that there is a chance of the metastatic lesions being of sarcoïdosis origin or another granulomatous disease. To avoid misdiagnosis, it is better to obtain a tissue diagnosis.
A phase lb 4-arm open-label randomized study to assess the safety and efficacy of h-R3 monoclonal antibody against EGFR in combination with chemoradiation therapy or radiation therapy in patients with advanced (stage III or IVA) inoperable head and neck cancer.

Abstracts:-

**Background:** Patients (pt) with advanced inoperable squamous cell carcinoma of the head and neck (SCCHN) have poor radiotherapy alone (RT) outcome. EGFR is overexpressed in >90% SCCHN. h-R3mAb (BIOMAb/nimotuzumab/TheraCIM) is a humanized monoclonal antibody, a validated oncotherapeutic-targeting EGFR. Objective: To investigate the safety and efficacy of concurrent h-R3mAb in combination with chemoradiotherapy of SCCHN. **Methods:** September 2004-2005, pt 18-70 yrs, SCCHN stageIII-IVA, 113 screened, 92 enrolled and randomly assigned to, Group A: radical radiotherapy (pt) and Group B: chemoradiotherapy (pt). Randomization within Group A: [RT]v/s[RT+h-R3mAb] and within Group B: [RT+CT]v/s[RT+CT+h-R3mAb] (n = 23 in each arm). Protocol: Radiotherapy: TD: 66 Gy, 2Gy/Fr, 5Fr/w, 6.5wks. Radiation sensitizer (chemotherapy): CDDP-50mg/wk x 6wks. Study Drug (h-R3mAb): 200 mg/wk I.V.60min x 6weeks. **Results:** Evaluable (n = 76) in Group A-36 and Group B-40. F/u Analysis at 30 months after end of RT. Survival rate ITT: Group B: CT+RT+hR3- 69.5% v/s CT+RT-21.7% (p = 0.0011); Group A: RT alone - 21.7% v/s RT+ hR3-39.1% (ns). Progression-free survival: RT alone - 3(13.04 %) v/s RT+hR3mAb-8 (34.78 %), RT+CT-5 (21.74 %) v/s RT+CT+hR3mAb-13 (56.52%). Median overall survival (OS): CT+RT+hR3 - NR* v/s CT+RT- 21.96 months (hazard ratio [HR]-0.337, p - 0.0018) and RT alone - 25.02 v/s RT+hR3 - NR*(HR-0.678, p - 0.39). Disease-free survival: CT+RT+hR3- NR* v/s CT+RT-21.30 mths (HR-0.344 , p - 0.0052) and RT alone-25.02 v/s RT+hR3- NA* (HR-0.599, p - 0.32). (NR* median OS is yet to be reached). Safety: few grade 1/2AE, no HAMA observed. OS per protocol - adding h-R3mAb to chemoradiation resulted in a reduction in risk of death (rrd) by 85% (HR 0.15, p - 0.0006) and to RT a 36 % rrd (HR0.64, p - 0.33). **Conclusions:** Concurrent use of h-R3mAb with RT or RT+CT is safe and efficacious. It enhances radiation and chemotherapy responses. Concurrent use of h-R3mAb with chemoradiotherapy enhances long-term loco-regional control and survival. Adding biological agents to physically targeted modality improves long-term therapeutic outcome of SCCHN.

**Materials/Methods**

The RCT, from September 2004–2005, patient age 18–70 years with SCCHN Stage III–IVA. There were 113 patients screened, 92 enrolled and were randomly assigned to group A: radical radiotherapy (RT) and group B: chemoradiotherapy (RT+CT). Randomization within group A: (RT) vs. (RT+h-R3mAb) and within group B: (RT+CT) vs. (RT+CT+h-R3mAb) (n = 23 in each arm). Radiotherapy: TD 66 Gy, 2 Gy/Fr, 5Fr/w, 6.5 weeks. Radiation sensitizer (chemotherapy): CDDP-50 mg/week × 6 weeks. Study drug (h-R3mAb): 200 mg/week, 60
minute i.v. infusion × 6 weeks.

Results
Follow-up analysis at 30 months. Evaluable (n = 76) in group A-36 and group B-40. Survival rate ITT, group B: CT+RT+hR3 - 69.5% vs. CT+RT-21.7% (p = 0.0011), group A: RT alone - 21.7% vs. RT+hR3-39.1% (ns).

Progression-free survival: RT alone 3 (13.04%) vs. RT+hR3mAb-8 (34.78%), RT+CT-5 (21.74%) vs. RT+CT+hR3mAb-13 (56.52%). Median overall survival (OS): CT+RT+hR3 - NR+ vs. CT+RT - 21.96 months (hazard ratio [HR], 0.337; p = 0.0018) and RT alone - 25.02 vs. RT+hR3 - NR+ (HR, 0.678; p = 0.39). Disease-free survival: CT+RT+hR3 - NR+ vs. CT+RT - 21.30 months (HR, 0.344; p = 0.0052) and RT alone - 25.02 vs. RT+hR3- NR+ (HR, 0.599; p = 0.32). (NR+ - Median OS is yet to be reached.) The OS with addition of BRM -

NA+ vs. non-BRM group: 21.96 months (HR, 0.337; p = 0.0018). Safety: few Grade-1/2AE, no HAMA response to weekly hR3 infusion. 1 episode of infusion reaction at 40 minutes, skin and mucosal reactions were not aggravated. OS per protocol: Adding h-R3mAb to chemoradiation resulted in a reduction in risk of death (RRD) by 85% (HR, 0.15; p = 0.0006) and adding h-R3mAb to RT a 36% RRD (HR 0.64; p = 0.33).

Conclusions
Concurrent use of h-R3mAb with radiotherapy or chemoradiation in SCCHN is safe and efficacious. It enhances radiation and chemotherapy responses. Concurrent use of h-R3mAb with chemoradiation therapy enhances long-term locoregional control and survival. Adding biologic agents (BRM) to physically targeted therapeutic modality improves long-term therapeutic outcome of SCCHN.

16) Poola I, Abraham J, Marshallleck JJ, Yue Q, Fu SW, Viswanath L, Sharma N, Hill R, Dewitty RL, Bonney G 2009; Sep;583(18):3069-75; PMID: 19698714  october International

Molecular Constitution Of Breast But Not Other Reproductive Tissues Is Rich In Growth Promoting Molecules: A Possible Link To Highest Incidence Of Tumor Growths.

Abstracts:

n the current study we tested if highest incidence of benign as well as cancer growths in breast tissue is due to constitutive molecular composition of this tissue. To delineate the molecular basis, we compared the expression of nine functional gene modules (total 578 genes) that regulate major positive growth and negative inhibitory signals in normal breast with two other reproductive tissues, ovary and uterus. We present data to demonstrate that breast tissues constitutively have very highly elevated levels of several growth promoting molecules and diminished levels of inhibitory molecules which may, in part, contribute for highest incidence of tumor growths in this tissue.

November National

**Abscopal effect in a patient with chronic lymphocytic leukemia during radiation therapy: a case report**

Abstracts:

Radiotherapy has a significant impact on the local tumor environment and its distant component. Abscopal effect is the bystander effect of radiotherapy observed at a site distant to that irradiated within the same subject. Abscopal effect even though described, is not a common clinical event. We report a documented observation of abscopal effect in a patient of Chronic Lymphocytic Leukemia during radiation therapy.


**Nimotuzumab, a promising therapeutic monoclonal for treatment of tumors of epithelial origin.**

Abstracts:

Nimotuzumab is a humanized therapeutic monoclonal antibody against epidermal growth factor receptor (EGFR). Clinical trials are ongoing globally to evaluate nimotuzumab in different indications. Nimotuzumab has been granted approval for use in squamous cell carcinoma of head and neck (SCCHN), glioma and nasopharyngeal cancer in different countries. This review focuses on the unique functional characteristics of nimotuzumab. Also, it discusses the safety and efficacy data obtained from the Phase IIb clinical trial conducted in India in SCCHN. Post marketing surveillance data from Cuba for the use of nimotuzumab in pediatric and adult glioma is also discussed. Overall, nimotuzumab has immense therapeutic potential in cancers of epithelial origin.


**Association between plasma homocysteine and riboflavin status in Acute Lymphoblastic Leukemia in children.**

Abstracts:

Remethylation of homocysteine to methionine is dependent on an adequate supply of one or more of the B vitamins like folate, vitamin B(12) and vitamin B(6). Plasma total homocysteine (tHcy) is also influenced by genetic factors such as polymorphisms in the methylenetetrahydrofolate reductase (MTHFR) gene. MTHFR is a flavo enzyme and a key player in folate metabolism and changes in its activity could modify the susceptibility to Acute Lymphoblastic Leukemia (ALL). In this case - control study we have examined the effect of riboflavin status as measured by erythrocyte glutathione reductase activation coefficient (EGRAC) on homocysteine levels along with vitamin B(12) and folate in pediatric ALL. Folate and B(12) levels were significantly lower among cases as compared to controls while EGRAC and tHcy did not differ significantly among the groups. The multivariate regression analysis revealed that in the ALL group EGRAC significantly influences tHcy levels suggesting that riboflavin availability may be a predictor of tHcy levels in patients with ALL. This finding may have implications for tHcy lowering therapy.

Keywords: thcy; homocysteine; riboflavin; folate; riboflavin statu; vitamin; mthfr; thcy level; plasma homocysteine; lymphoblastic leukemia; acute lymphoblastic; lymphoblastic; leukemia; plasma; children;
An Interesting Case of Lung Mass

Abstracts:

A 46-year-old male smoker presented with cough and fever to a chest physician, who on the basis of chest X-ray started him on antitubercular treatment. However, further evaluation suggested that the patient was suffering from a rare disease, i.e. Anaplastic large cell lymphoma of lung. Although lung involvement in cases of lymphoma is observed in as high as 40% of cases, in autopsy series, the exact clinical incidence is not known. One of the largest lymphoma groups reported it to be around 25%. However, primary pulmonary lymphomas have been extremely rare (0.4%), and whenever present they are of (Mucosa Associate Lymphoid tissue) MALT type, with occasional diffuse large cell lymphomas. The anaplastic variant is extremely uncommon. Usually the treatment results are satisfactory with more than 80% of the cases surviving even after 3 years. Here we report the case of anaplastic primary nonHodgkin’s lymphoma of lung and review the literature.

Keywords: Primary pulmonary lymphoma, treatment, immuno histo chemistry

Radioactive iodine (RAI) therapy plays an important role in the management of thyroid malignancies. Leukemia is a very rare complication of radioactive therapy. There are very few case reports with doses below 100 mCi causing leukemia. We report a case of papillary carcinoma of the thyroid treated with 80 mCi RAI who later developed acute myeloid leukemia. Thus, all patients with thyroid carcinoma treated with RAI should undergo periodic hematological examinations irrespective of RAI dose.

Key words: Radioactive iodine, thyroid carcinoma, acute myeloid leukemia

The radiotherapy community has in the past few decades witnessed dramatic shift in the treatment modalities from conventional 2-D radiotherapy to the now widely practiced 3-D CRT, IMRT and evolving IGRT. IMRT has generated so much interest because of its unique dosimetric modulation to concentrate doses to the targets of interests while also being able to relatively spare neighboring normal tissue. However IMRT is not the all in one solution for radiotherapeutic management of solid malignancies. The current enthusiasm in IMRT most be tempered with an understanding of the complexities of IMRT planning, treatment delivery, quality assurance, monitoring and clinical limitations. The widespread implementation of this technological innovation may have been a bit premature considering that clinical information regarding the same is still being generated. This article tries to give an overview of the potential advantages/disadvantages of IMRT in the clinical set up and the few controverses (Grey Zone) that are still being resolved. There is evidence to indicate that indiscriminately used...
IMRT may even harm the patient or have an inferior therapeutic index to 3DCRT. This and other pertinent issues will be covered by the authors in this short review of IMRT in clinical practice.

The radiotherapy community has in the past few decades witnessed dramatic shift in the treatment modalities from conventional 2-D radiotherapy to the now widely practiced 3-DCRT, IMRT and evolving IGRT. IMRT has generated so much interest because of its unique dosimetric modulation to concentrate doses to the targets of interests while also being able to relatively spare neighboring normal tissue. However IMRT is not the all in one solution for radiotherapeutic management of solid malignancies. The current enthusiasm in IMRT must be tempered with an understanding of the complexities of IMRT planning, treatment delivery, quality assurance, monitoring and clinical limitations. The widespread implementation of this technological innovation may have been a bit premature considering that clinical information regarding the same is still being generated. This article tries to give an overview of the potential advantages/disadvantages of IMRT in the clinical set up and the few controversies (Grey Zone) that are still being resolved. There is evidence to indicate that indiscriminately used IMRT may even harm the patient or have an inferior therapeutic index to 3DCRT. This and other pertinent issues will be covered by the authors in this short review of IMRT in clinical practice.