Aims and Scope

International Journal of Hematology-Oncology and Bone Marrow Transplantation has been published since 2004, in hematology and oncology domains especially as the only journal in all stem cell transplantation domains with wide distribution. The journal is publishing in English language.

This journal is indexed in the Scientific Information Database (www.SID.ir), Chemical abstract and EMRO.

The main topics that the journal would welcome are:

Hematology, oncology and stem cell transplantation in all basic and clinical fields

We would be very delighted to receive your original article, review article, commentaries, case report and letter to editor on the above mentioned research fields.

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What is a central venous line?

 Mashhadi A., Tahsili F.

 Tehran University of Sciences, Shariati Hospital, Hematology- Oncology and Stem Cell Research Center

 Investigation of Awareness and Culture of Cancer Exposure in Zanjan Patients Suffering from Breast Cancer in 2009

 Moshtakha K., Valiaghdam S., Feikmoud F., Safari R., Salarpour F., Jiani M.

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 Cardiac Arrhythmias as a Complication of Cancer and Chemotherapy

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 Patient Information: Bone Marrow Transplantation (Stem Cell Transplantation)

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 Immunosuppressive Therapy and Malignancy in Organ Transplant Recipients: A Review Article

 Khalilvandi S., Tahsili F.

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 Daily Routine Nursing Care in Leukemia Patients

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 Immunosuppressive Therapy and Malignancy in Organ Transplant Recipients: A Review Article

 Khalilvandi S., Tahsili F.

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 Instructions to Authors
Neoadjuvant Chemotherapy in Bladder Cancer

Adib Sereshki M.M.
Kashan University of Medical Sciences, Iran

Bladder cancer is among most common cancers especially in men. After radical cystectomy for locally advanced bladder cancer, there is a significant rate of recurrence, most commonly as distant metastasis. For this reason, systemic chemotherapy has been explored in both Neoadjuvant and adjuvant settings. Some advantages of Neoadjuvant chemotherapy over an adjuvant design include: 1) better tolerance of chemotherapy prior cystectomy. 2) Allowing for individual assessment of in vivo tumor response and 3) downstaging that allows for better resectability and bladder conservation. Multiple studies have shown that complete pathologic Response (PT0) to preoperative chemotherapy is a powerful surrogate of long term disease free survival in locally advanced bladder cancer. On the basis of a more recent metaanalysis with cisplatin based combination chemotherapy complete pathologic response (PT0) up to 38.1% and absolute survival benefit of 6.5% were observed that is similar to that seen for perioperative chemotherapy for other malignancies notably breast and colorectal cancer, Recently some biologic biomarkers are able to predict tumor response to chemotherapy thus with identifying Nonresponders Protects them from toxicities of chemotherapy and preclude delaying potentially curative local therapies. Some of these including expression profiles of predictive genes in cDNA microarray, P53 and angiogenesis factor VEGF expression and lymph vascular invasion (LVI) on pathology specimen.

With newer generation chemotherapy agents and molecular targeted therapies Such as ani- EGFR agents and trastuzumab improvement in pathologic complete response and thus overall out come may be seen that will be a primary goal for bladder cancer patients.

Keywords: Bladder cancer, Chemotherapy

New Advances of Proteomics in Early Detection of Pancreatic Cancer

Adib Sereshki M.M.
Kashan University of Medical Science, Iran

Introduction: Pancreatic cancer is an uniformly lethal Disease. At the time of diagnosis 80 % patients have advanced disease for which no curative therapy exists. The current methods for diagnosing pancreatic cancer are ineffective. The sensitivity of detecting pancreatic ductal adenocarcinoma using computed tomography (CT Scan) alone is approximately 50 % for tumors less than 3 cm , and ERCPs 78 % sensitive for diagnosing stage I ductal adenocarcinomas and ampullary lesions of pancreas. Therefore, there is an urgent need for new biomarkers that can provide the early detection of pancreatic cancer. Most accurate biomarkers to date are proteins and therefore a proteomic Analysis may be the best approach to identify new biomarkers which are potentially more sensitive and specific than existing conventional modalities.

Method
This study is a review of literatures about the last progresses in the oncoprotomic of pancreatic cancer especially in the field of new biomarkers discovery.

Discussion: The effective treatment of pancreatic cancer is critically relying on the diagnosis of the disease at an early stage and in recent years there has been a substantial interest in applying proteomics technologies to identify protein biomarkers in serum, tissue and pancreatic juice for early detection of this cancer, Although CA19.9 is most commonly used, its sensitivity and specificity are modest. In one study one hundred fifty–four proteins were commonly overexpressed in all pancreatic cancers .Nine protein spots could effectively separate pancreatic cancer patients from normal controls that prominent among these candidates was fibrinogen Y that was overexpressed in serum & tumoral tissue of pancreatic cancer patients. In another study macrophage inhibitory cytokine 1 (MIC-1) protein was expressed in 88 % pancreatic adenocarcinomas by
immunohistochemistry and serum proteomic analysis and the combination of MIC –1 and CA$_{19.9}$ significantly improved diagnostic accuracy for pancreatic cancer detection. Another protein that identified by gen expression Analysis was osteopontin that a level of 2SD above the mean of this protein had a sensitivity 80 % and specificity of 97 % for pancreatic cancer diagnosis. In a recent study by SELDI mass spectroscopy a set of four mass peaks recognized that can accurately discriminating Cancer patients form healthy controls with sensitivity and specificity values of 97.2 % and 94.4 % respectively and when combined with CA$_{19.9}$ , 100 % of pancreatic cancer patients in this study , including early stages (stage I and II) tumors , were detected .Also , proteomic studies of pancreatic juice can identify known pancreatic cancer tumor markers such as CEA and MUC-1 and proteins over expressed in pancreatic cancers such as lipocalin 2 and Pg96 antigen that can help early diagnosis of pancreatic cancer .

Results: Because the current methods for early diagnosis of pancreatic cancer are ineffective, At present proteomic technologies with detection and discovery of new cancer–related biomarkers can help us to identify early stage pancreatic cancers and therefore an effective treatment of this lethal disease.

Key words: Proteomic, Pancreatic Cancer

**Peripheral Blood Changes in Pulmonary Tuberculosis before and after Treatment**

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Background: Tuberculosis is an ancient disease that will affect human health in the future. Tuberculosis is a systemic disease and more body systems were affected such as hematologic system. This study was conducted to determine peripheral blood changes in pulmonary tuberculosis detecting by H*3 technicon in urmia hospitals in the west of Iran.

Methodology: In this study 85 patients with active pulmonary tuberculosis were evaluated for peripheral blood manifestation before and after anti tuberculosis chemotherapy. Subjects were diagnosed as active pulmonary tuberculosis with two sputum smear positive for acid fast bacillus or one smear plus one positive culture. Peripheral blood count and indices were determined by H*3 technicon system and peripheral blood smear.Data were analyzed with SPSS.Win soft ware and using Mac Nemar and Paired – Sample T test.

Results: According to the result of this study 85 patients were considered as case group and meeting diagnostic criteria for cardiac syndrome X. The mean age of subjects was 54.54 year (SD=8.99) and range of 38-72 year. 44 of patients (81.5%) with CSX have had positive serology for helicobacter pylori that was higher than control group (p= 0.01).

Conclusion: Considering to these result, prevalence of anemia among patients that were diagnosed as active pulmonary tuberculosis very high. Anemia in these patients was contributed to anemia of chronic disease and was not evaluated closely. After successful treatment some of anemic patients were still anemic. Anemia in presentation of tuberculosis must be evaluated and managed adequately.

Keywords: Tuberculosis, anemia, blood count

**Prognostic Value of Platelet Indices in Patients with Unstable Angina**

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Background: Platelets play a crucial role in the pathogenesis of atherosclerotic complications, contributing to thrombus formation or apposition after plaque rupture. Platelet indices are marker of platelet function. The aim
of our study was to investigate whether mean platelet volume (MPV) is associated with the severity and outcome of ACS.

Methods: This cross-sectional study was conducted prospectively from July 2008 to January 2009 at Taleghani Hospital, Urmia in the west of Iran. Patients with unstable angina were participated in the study. After identification of the patients, we extracted detailed data from the medical records, history taking, physical examination and laboratory. One hundred and sixty-four consecutive patients admitted with diagnosis of unstable angina were primarily enrolled in the study. Samples for platelet counts and MPV were collected using sodium citrate as anticoagulant and were done on a Sysmex auto-analyzer.

Results: The mean age of those undergoing our study protocol was 55.59 years (SD±12.7), and 70 (42.7%) of them were women. Non-ST elevation myocardial infarction was demonstrated in 12 (7.3%) of patients that was admitted for evaluation of unstable angina. Obstructive coronary artery disease was demonstrated in 49 (29.9%) patients. We did not find statistically significant correlation between MPV, PDW and PLCR and occurrence of myocardial infarction. However, in this study data analysis was not showed prognostic value of platelet indices to predict obstructive coronary lesion in our patients.

Conclusions: The study results were not indicated that platelet indices have prognostic value in patients with unstable angina. However, to evaluate this hypothesis may need to more study with large samples and better design.

Keywords: Mean platelet volume, Unstable Angina, Atherosclerosis

Bone Marrow Necrosis: Frequency and Clinicopathological Findings in Marrow Biopsies

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Background: Bone marrow necrosis (BMN) is a rare and ominous complication of a wide variety of diseases including hematologic malignancy. This study was performed to identify frequency and the underlying associated diseases of marrow necrosis.

Methods: About 850 bone marrow trephine biopsies related to living patients at the Pathology Department of Urmia Imam Hospital between March 1998 and January 2008, were retrospectively reviewed. The reviews include clinical and laboratory findings from files of the patients.

Results: Eight cases of bone marrow necrosis were found. Frequency was 0.94 percent. Ages of the patients were between 18 and 85 years, and four of them were female. Prominent symptoms of the patients were bone pain, fever, fatigue, and jaundice. The most common laboratory finding were anemia, cytopenia, elevated lactate dehydrogenase (LDH), and alkaline phosphatase (ALP). Underlying diseases of bone marrow necrosis in our patients includes systemic lupus erythematosus, multiple myeloma, metastatic gastric cancer, acute myeloid leukemia (M4), hairy cell leukemia, lymphoma, chronic myeloid leukemia and sepsis.

Conclusion: Our findings suggest that the conditions associated with BMN are varied and malignancy remains common. In cases presented with pyrexia, bone pain, pancytopenia, elevated LDH and ALK, marrow necrosis must be thought. Although prognosis is very bad, supplementary therapy, in addition to the underlying disease must be performed.

Keywords: Bone marrow necrosis, Anemia, Cytopenia, Systemic lupus erythematosus

Influence of Chemotherapy on the Oxidant/Antioxidant Status in Patients with Acute Myeloid Leukemia

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Background: Many of the chemotherapeutic agents used in patients with cancer cause to generate the enormous amounts of free radicals which may be associated with cell injury. In this study we aim to assess the effects of chemotherapy regimen on oxidant/antioxidant status in patients with acute myeloid leukemia.

Material and Methods: 38 newly diagnosed patients with AML (44.7% female and 55.3% male) with mean age 34.05±12.49 years were recruited in this study. All patients received Cytarabine at 100 mg/m² daily by continuous infusion on days 1 through 7 and daunorubicin at 45 mg/m² on days 1 through 3. Plasma levels of malondialdehyde (as indices of lipid peroxidation), total antioxidant status (TAS), and the levels of erythrocyte activity of superoxide dismutase (SOD) and glutathione peroxidase (GPx) were determined before chemotherapy and 14 days after chemotherapy with daunorubicin and cytarabine.

Result: Plasma malondialdehyde (MDA) concentrations increased significantly (from 2.68 ± 0.89 nmol/ml to 3.14 ± 1.29 nmol/ml) during the 14 days postchemotherapy period (P=0.04). Plasma TAS concentrations changed with chemotherapy from 1.09 ± 0.15 mmol/L to 1.02 ± 0.14 mmol/L with P=0.005. Erythrocyte SOD and GPX activity decreased overtime from 1157.24 ±543.61 U/gHb to 984.01 ± 419.09 U/gHb (P=0.04) and 46.96 ±13.70 U/gHb to 41.40 ±6.44 U/gHb (P=0.02) respectively.

Conclusions: In conclusion, we report here that there is an increase in MDA levels and a decrease in the levels of antioxidant enzymes and total antioxidant status. This suggests that chemotherapy causes these changes as a result of enormous production of reactive oxygen species in the patients with AML. Antioxidant supplementation must be approached with caution because of the probability of reduction the therapeutic efficacy of these cytotoxic drugs.

Key Words: Acute myeloid leukemia, Chemotherapy, Oxidative stress, Antioxidant

Short-Term Outcome of Hyper-CVAD Treatment in Acute Lymphocytic Leukemia in Iran

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Background: With advent of modern chemotherapy regimens acute lymphocytic leukemia (ALL) has gained a much better prognosis in adults. Hyper-CVAD is an effective regimen with over a decade of experience but studies on outcomes in different populations are scarce.

Methods: All adult ALL patients who were admitted for the first time to the Hematology and Oncology ward of Imam Khomeini Hospital, between October 2007 and February 2009 were recruited. The patients underwent hyper-CVAD regimen and short-term outcomes were measured.

Results: Thirteen male and ten female patients with a median age of 27 y were recruited. Flowcytometry showed 14 (61%) pre-B, 3 (13%) T, 5 (22) B and 1 (4%) unknown of subtypes of lymphocytic leukemia. Cytogenetic abnormalities were identified in 4 patients which were t(9;22), Klinefelter 47(xxy)+trisomy 5, hyperdiploidy and tetraploidy. In response to our induction 18 (78%) went into complete remission (CR) and 3 patients (13%) became refractory. We also had 2 (9%) mortality of induction phase. Fever and neutropenia as our complications were seen in 12 (52.2%) patients. 9 (39.1%) patients was our mortality rate (2 during induction, 2 in consolidation, 4 after relapse with salvage and 1 with salvage being refractory).

Discussion: Short-Term outcome of hyper-CVAD regimen shows a poorer prognosis compared with other reported data probably attributed to a different genetic background and clinical settings which warrants further long-time investigations in our population.

Keywords: Leukemia-ALL-HyperCVAD

Clear Cell Sarcoma of Kidney in 31 Years Old Man

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True sarcoma of the kidney in adults are extremely rare. Renal sarcoma is less common but more lethal than sarcoma of any other genitourinary site, including the prostate, bladder, paratesticular region. Primary mesenchymal tumors of kidney typically arise from the capsule; histologies include leiomyosarcoma (occasional from renal vein), liposarcoma, rhabdomyosarcoma, hemangiopericytoma. Renal sarcoma should be suspected in any patient with a very large or rapidly growing renal mass, or pararenal origin, the capsule, or perisinous region, large size tumor without lymphadenopathy, hypovascular pattern on angiography (exclud hemangiopericytoma). Epithelial RCC with sarcomatoid differentiation is more common than true sarcoma, occurring in 4-5% of RCC, and often seen together with high grade RCC. Sarcomatoid RCC has a poor prognosis, with rapid progression and median survival of 7 months. High grade Sarcoma often metastasizes, with the lungs being a primary site of spread, and prognosis is poor (few months). Initial resection of the kidney, often mandates radical nephrectomy along with en bloc excision of adjacent organs. There is no standard chemotherapy regimen for renal sarcoma. Clear cell sarcoma of renal is extremely rare in adults and we reported this case.

CASE: The patient is a 31 years old man with complaint of right upper quadrant and flank pain and hematuria in April 2009. In abdomino pelvic spiral CT scan with contrast, a 6cm mass in upper pole of right kidney associated with intra renal vein and inferior vena caval mass (or thrombosis) were seen. He is referred for radical right nephrectomy and resection of intra IVC mass in April 2009. The pathological report of right kidney tumor and intra IVC mass was malignant round cell tumor (and after I.H.C, malignant clear cell sarcoma of renal is reported by professor Kamalian). One week after surgery the patient complains a pleuritic chest pain and dyspnea. In CT angiography of thorax, cut off and mass effect in right pulmonary artery were seen (tumoral or thrombosis) and anticoagulation therapy of the patient is started. 5DAYS Chemotherapy with holoxon and mesna and doxorubicin, with G-csf (5microgram/m2/day) in day6-10) support is started. In 27 September of 2009 (after 4 cycle chemotherapy) no evidence of metastasis or defects were seen in thoracic spiral CT scan.

Keywords: Clear cell sarcoma, Kidney

**Study on Prevalence of Herpes Simplex Virus Types 1 and 2, Ebstein-Barr Virus, and Cytomegalovirus in Patients with Acute Lymphoblastic Leukemia**

Alipourfard I., Noroozi Esfahani M., Heydari N., Jalili E.

Objectives: Viral infection, especially caused by herpes viruses, is now recognized as an important cause of morbidity and mortality in immunocompromised cancer patients. This study aimed at studying seroprevalence of Herpes simplex virus types 1 and 2 (HSV 1 and 2) Epstein-Barr virus (EBV), and cytomegalovirus (CMV) in patients with acute lymphoblastic leukemia (ALL).

Material and Methods: This study was conducted on 48 hospitalized patients with ALL in hospitals of Tehran accompany to control groups from March 2007 to September 2008. We used ELISA method in detecting HSV1 and 2, CMV, EBV antibodies of both types IgM and IgG using commercial kits of Diaplus Company. Detection of DNA for both CMV and EBV by polymerase chain reaction was carried out.

RESULTS: High prevalence of HSV 1 and 2, CMV and EBV IgG antibodies in both leukemic patients (69%, 100%, 83%) and their control (80%, 100%, 95%) was observed. Significantly higher percentage of HSV 1 and 2 IgM or reactivated infection was found among leukemic patients 12/48 (25%) compared with normal control (0%). Analysis showed that prevalence of HSV 1 and 2 IgG increased from 12/23 (52%) in patients <5 years to 7/9 (77%) in patients >10 years and reactivation of HSV1 and 2 increased with increasing age from 1/23 (4%) in patients <5 years to 2/9 (22%) in patients >10 years. No difference in seroprevalence was found among both gender, and no difference was found in leukemic patient with granulocytopenia.

CONCLUSION: The data show a higher exposure to HSV 1 and 2 both primary infections and reactivation among ALL patients. Therefore, acyclovir prophylaxis could be highly effective for seropositive leukemic patients under chemotherapy.

Keywords: HSV 1 and 2, CMV, EBV, ALL
The Genetical Association between Prostate Cancer and Type 2 Diabetes

Alipourfard I., Heydari N., Jalili E.

Objectives: Diabetes mellitus may be a protective factor for prostate cancer since both were found to be negatively associated. Based on the same genetic background, parents of diabetic patients might show similar risks concerning cancers.

Material and Methods: We conducted a case-control study, where family history of 794 type 2 diabetic cases and 775 non-diabetic controls was ascertained. Then, we expanded study up to 801 type 2 diabetic cases and 1267 non-diabetic controls.

Results: Concerning the 794 type 2 diabetic patients and 775 controls, a lower number of prostate cancers was observed in fathers of diabetic patients (OR 0.47; 95% CI 0.22 to 0.94; p = 0.032). Since diabetic patients were 14.3 years older than the controls, higher levels of cancer history among parents of diabetic patients would have been expected. Thus, the observed lower level of history of prostate cancer can be regarded as highly reliable. In the analysis of 801 type 2 diabetics and 1267 controls, we again observed a lower number of prostate cancers in fathers of diabetic patients (OR 0.49; p = 0.0279). However, by statistical method of Mantel-Haenszel showed no significant result concerning cancer histories.

Conclusion: As first-degree relatives, e.g. diabetic patients and their fathers, share 50% of their genes, it appears plausible that genetic factors may play an important role in the negative association between diabetes and prostate cancer.

Keywords: Cancer, Prostate, Diabetes

Study the Different Pattern of HCMV gB Genotypes in Clinical Outcome of Bone Marrow Transplant Patients

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Background and Objectives: Different genotypes of human cytomegalovirus (HCMV) glycoprotein B (gB) producing gene may influence the different pattern of HCMV in Bone marrow Transplant (BMT) recipients. So in this investigation the prevalence and role of different HCMV-UL55 genotypes in multiple post transplant clinical presentations were studied.

Materials and Methods: In this cohort and retrospective study blood (plasma and Buffy coat) and urine samples were collected for 6 years from 110 BMT patients pre-transplantation and followed weekly for 100 days post-transplantation. HCMV-UL55-nested-PCR method was optimized and used for detection and genotyping of HCMV infection in collected samples of BMT recipients. The prevalence of HCMV UL55 genotypes were analyzed by RFLP method for all UL55-nested PCR positive samples.

Results: UL55-nested-PCR positive results were diagnosed in plasma 3540/4950 (71.5 %), Buffy coat 3634/4950 (73.4 %) and urine 3292/4950 (66.5 %) samples of BMT patients. Also mean of 25% of transplant donors were infected totally with HCMV infection. The decline pattern of the prevalence of UL55 genotypes in plasma, Buffy coat and Urine samples were as followed, respectively: gB2[gt]gB3[gt] gB1[gt] gB4, gB2[gt] gB1[gt] gB3[gt] gB4 and gB2[gt] gB3[gt] gB1[gt] gB4. The gB gene variations that may influence the pathogencity of HCMV in transplant patients.

Conclusion: Detection of gB2 UL55 genotype in the most clinical samples of BMT patients and also diagnosis of significant association between different genotypes of HCMV-UL55 strains with clinical outcome of transplant patients compared with the result of another HCMV researchers, announced the need of completed studies focused on the pattern variation of HCMV-UL55 genotype in clinical complications of BMT recipients.

Keywords: Bone Marrow Transplantation, HCMV, genotype.
Evaluation of Demographic Data and Treatment Results of Colorectal Cancer Patients in Kermanshah, 1384-1387

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Colo-Rectal Cancer has the prevalence of 10% among all of the cancer proportionally and also it is the third common cancer in the both sex. Like the other malignancies, Colo-Rectal Cancer is multi factorial. Age, being the most important risk factor, in a way that, the prevalence of occurrence of sporadic form of this cancer is augmented remarkably in the ages above 45 years old. Clearly statistics demonstrate that, the rate of this cancer is doubled in each ten years period of life. In addition to age, dysmorphic changes in the epithelium of the lumen of the colon has also the principal reason for developing Polyp form lesion( particularly Adenoma) being the major predisposing factor for evolution of colorectal cancer in upcoming years.

Beside, the familial form of this cancer in the first or second generations can be a notable potentiality of the genesis of this cancer. Abnormal B.M.I (Body Mass Index) specifically more than 30 enhances the risk of rectal cancer in men.

Finally, the role of genetics in composing syndromes like Lynch, FAP and HNPCC in this cancer can not be ignored.

In this study, 54 numbers of patients with Colo-rectal who referred to Oncology Clinic of University of Kermanshah have been computed in 4 years (from 1384 to 1387).

The average age of the patient was 49.1 years old (20 up to 77 years). 31 of them were male and 23 were female. These patients came from Kermanshah mainly and the provinces around (kordestan, lorestan and Hamedan).

Rectal cancer was diagnosed in 20 patients and 34 had Colon cancer in which 17(31.5%) was in stage II, 19(35.2%) in stage III and 18(33.3%) in stage IV. For patients in stage III and IV, two protocols (FOLFOX and FOLFIRI) were established

All of cases in stage III was treated by FOLFOX, unlike the patients in Stage IV contributed FOLFOX 8 cycles followed by FOLFIRI in the same numbers of cycle (Sequential method).

Evaluation of demographical data of the patients revealed that as a comparison to the official results in western countries, in this study, age of diagnosis was less (49.1 years versus 55 years).In parallel, analyzing of solid data manifested that, OS (Overall Survival) and PFS (Progression Free Survival) were 18 and 17.3 months respectively.

Considerably, the prevalence of visceral metastasis was higher in cancer of Rectum in which 12 cases out of 20 had this form of metastasis (60%).

Although, the modalities of treatment in Colo-rectal cancer have been ameliorating imperceptibly, still, various techniques conducted for its managements.

As an example, in some centers, Palliative methods has peculiar role for controlling the symptoms and size of tumor but comprehensively providing better OS (Overall survival) is an definitive objectives for all of these approaches.

Clearly, with deliberation of side effects of Chemo Therapy, it provides great advantages in many aspects as a comparison to Best Supportive care. Precisely, FOLFOX AND FOLFIRI which were administrated in 8 cycles concomitantly (Sequential form) afforded considerable response with manageable complications.

The result of treatment in the study is comparable to other trials utilizing more modern procedures of management like *Target therapies*(OS; 18.4m for CT versus 19-20m for Target therapies). It is blatant that, CT has more superiority in term of cost and availability as the others.

Hereby, it is more efficient for performing *Sequential method* in managing the patients

Keywords: Colorectal cancer, FOLFOX, FOLFIRI

Successful Management of Pregnancy in an Aplastic Anemia Case In Tabriz

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Successful Management of Pregnancy in an Aplastic Anemia Case In Tabriz

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Pregnancy in Aplastic Anemia is a rare clinical status, posing a risk to both mother and fetus. Only a few cases with a successful outcome have been reported. There are some reports in the literatures of pregnancy Induced Aplastic Anemia, but we are presenting a case of Aplastic Anemia and further pregnancy.

We are presenting a 27-year-old woman diagnosed as AA in Jan 2004, who has been treated with ATG and Cyclosporine, and without need to transfusion during the 4 years. She was referred to us, one year ago, complaining of easy fatigability and head ache. Her lab data are Hb=7.5 gr/dL, Plt=19×103, WBC=2100. According to her good response to Immunosuppressive Therapy, we decided to start treatment and Bone Marrow Transplantation for her. But we noticed that she is pregnant. Supportive therapy in the form of Red Blood Cells (36 unites, 2 unites each 2 weeks) and platelets (40 unites, during last month) were given. Except for mild epistaxis, no bleeding from any other site was observed. Fetal monitoring was done by Ultrasonography, each month, and revealed a single live fetal with normal growth. No history of medical illness or drug intake in the past or during this pregnancy was reported. She delivered a normal weight infant with no congenital malformations.

Keywords: Aplastic Anemia, Pregnancy, Management

Clinical use of Haemate-P in Inherited von Willebrand’s Disease: A Patient with Type 3 VWD and Recurrent Menometrorrhagia

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Case Report
Von Willebrand disease (VWD) is the most common genetic bleeding disorder with a prevalence of approximately 1-2 percent confirmed in different population studies. The severity of the bleeding tendency is usually proportional to the degree of the VWF defect, although the large majority of cases diagnosed appear to have a mild disease. Patients with VWD may require short- or long-term prophylaxis treatment. The published studies document the safety and efficacy of VWF/F VIII concentrates as prophylaxis in VWD patients, who are unresponsive or have a contraindication to desmopressin (DDAVP) therapy, in particular of Haemate P, the most widely used VWF/FVIII concentrate due to its high VWF: F VIII ratio.

We report the case of a 23-year-old female with type 3 VWD and a history of recurrent bleeding as menometrorrhagia. Bleeding frequency and severity progressively increased and the patient showed chronic anemia, five unite Packed Red Cells and >4240ml of Cryoprecipitate on-demand transfused during 6 months before. Hormone treatment did not control bleeding. She received regular infusions of the factor VIII/von Willebrand factor concentrate Haemate-P, twice a week, by the median daily dose 80 VWF: RCo IU/kg for 4 months, to prevent recurrent bleeding. Prophylaxis with Haemate-P was shown to be safe and effective, with clinical response rated as excellent/good, according Menstrual Chart and Scoring System in this patient. No serious adverse events, including thrombosis, reported. Based on findings, Haemate P showed to be effective and safe for the clinical management of patients with VWD, whether given on demand or as prophylaxis. Appropriate dosage and timing of FVIII/VWF administration is also very important in patients exposed to long term prophylaxis for recurrent bleedings and should be planned to keep FVIII level between 50 and150 U/dL. Long-term prophylaxis with Haemate P has been shown to be safe, effective (also in terms of quality of life) and cost saving especially in patients with severe recurrent bleeding.

Key words: von Willebrand’s disease, Haemate P, prophylaxis, menometrorrhagia

Successful Use of Single Dose of Factor VIIa (Novoseven) in a Patient with Acquired Hemophilia

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Acquired hemophilia is a rare condition, and is due to the production of auto antibodies in adult life which inactivate factor VIII. The use of high-dose rFVIIa (270 µ/kg) in some clinical trials and registries, appears safe, when use for congenital and acquired haemophilia.

A 59-year-old man with a 3-year history of GI Bleeding was admitted to the Shahid Ghazi /Tabriz hospital. He has no family medical history of hemophilia or any other bleeding disorders and he has history of several episodes of GI Bleeding (Recurrent GIB).

After treatment with several protocols for Gastritis and Ulcer and H. pylori Infection and transfusion therapies (including packed red blood cells, fresh frozen plasma, and cryoprecipitate) and administration of human antihemophilic globulin, corticosteroid, and cyclophosphamide bleeding was not still stopped. He was diagnosed with acquired factor VIII (FVIII) deficiency based on the laboratory examination: Factor VIIIc=20%, Inhibitor to F VIII=0.74 BU, Mixed aPTT=83.9 Sec.

At the time of his last admission to our hospital, he has a history of Melena and Anemia and Malaise. Lab data were Hb=5.6 g/dl, Hct=23.5%. Because the patient has recently undergone transfusion of blood products, Factor VIII Inhibitor and Factor assays with apparent lupus inhibitor interference and Indirect Coomb's Negative has been reported for him. He was immediately given rFVIIa, initially dosed 90 µ/kg every 3 hours for 2 days but hemostasis was still not achieved. An effective response to treatment was observed by using of single dose therapy of rFVIIa as 270µg/kg, for 2 days. The GI bleeding of the patient was slowing immediately and complete hemostasis was achieved within 24 hours. No serious adverse events were reported.

Keywords: acquired haemophilia, inhibitors, rFVIIa, GI bleeding

An Uncommon Occurrence of Acute Myeloid Leukemia

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Acute Myeloid Leukemia is a malignant and clonal hematopoietic disorder and accounts about 80% of adult acute leukemias, that presents as de novo or following MDS. It shows typical clinical and cytological pattern of presentation hence most of the time fatigue, fever and symptoms related to anemia, thrombocytopenia, neutropenia and rarely Leukostasis are the presenting symptoms. Hepatosplenomegaly presents in one third of the cases and Lymphadenopathy, extramedullary involvement are rarely seen except in monocytic variants. Isolated involvement of liver and bone is rare and lytic bone lesions have been reported only in few cases.

In this case study we tried to report an uncommon occurrence of AML in a 21 y/o female who admitted in Rheumatology service as a spondyliitis. She experienced low back pain, anorexia, sever weight loss, fever, tenderness of lumbar spines and head of left humorous together with limited left shoulder girdle movements, and hematocytologic and pathologic challenges were not clear enough for specific diagnosis.

The clinical and Para clinical findings of the case looked uncommon for de novo leukemia or MDS-AML, hence close follow up of a medical student brought up the case into specific attention. Even thought there were so many questions left without clear answer but an uncommon progression, clinical and Para clinical presentation uncovered, that stressed the necessity of cytogenetic and molecular evaluation for diagnosis in malignant case of solid tumors as well as acute leukemias.

Keyword: Acute leukemia

Ovarian Dysgerminoma with Metastasis to Spinal Column

Ghahramanfard.F., Faranoush M.

Ovarian cancer is fifth in cancer deaths among women with gynecologic malignancy. This tumor have good initial responses to surgery and chemotherapy in 80% of cases, but more than 75% of patients die due to complications of disease progression. A female, 25 years old, admitted in Fatemieh hospital with complaints of
lower limbs paresthesia from 6 hours before admission in hospital. She had paresthesia in lower limbs that was increased gradually and urinary incontinence was added. Within 2 hours after admission she became paraplegic. She was treated with dexamethasone then was referred to a neurosurgeon for urgent laminectomy. Neurosurgeon reported spinal cord invasion with a tumoral mass. Pathologic diagnosis was metastatic dysgerminoma. Then radiotherapy and chemotherapy was done. Metastasis of ovarian tumor to spinal cord is rare and need more aggressive multidisciplinary treatment approach.

Keywords: Dysgerminoma, Ovary, Metastasis, Spinal Column

**Differentiation of Keratoacanthoma from Squamous Cell Carcinoma by AgNOR Staining**

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Objective: Differentiation of keratoacanthoma from squamous cell carcinoma (S.C.C) is occasionally difficult or impossible by routine hematoxylin-eosin staining. In this study, differentiation of these two tumors has been evaluated by using AgNOR staining.

Material and Methods: Thirty one cases of keratoacanthoma and 31 cases of S.C.C were selected. The AgNOR staining carried out. Counting of AgNOR was done in 100 cells of each tumor. Two criterias including M.AgNOR (mean number of AgNORs) and P.AgNOR (percentage of nuclei with 5 or more than 5 AgNORs per nucleous) were used. Statistical analysis was done by Mann- Whitney test.

Results: Significant increase in M. AgNOR and P.AgNOR was found in S.C.C compared with keratoacanthoma (M.AgNOR=16.52±10.1 and P.AgNOR= 84.12±23.4 in S.C.C compared with M.AgNOR= 6.58±4.4 and P.AgNOR= 52.29±26.7 in keratoacanthoma, P=0.000). Exceptionally overlapping was seen.

Conclusion: This study indicated that the AgNOR counting is a valuable diagnostic criterion for differentiation of keratoacanthoma and S.C.C especially in cases with borderline histologic features.

Keywords: Keratoacanthoma, Squamous Cell Carcinoma, AgNOR

**Dedifferentiated Chondrosarcoma of Soft Tissue, A Case Report**

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Chondrosarcoma or soft tissue is rare and mostly occurred in adults. Two different variants are described: Mesenchymal and myxoid. The cardinal clinical presentation is local soft tissue mass with gradually enlargement and increasing pain. There may or may not be calcification, and in uncalcified tumors the diagnosis may not even be considered by the radiologist. We represent a 52 years old man who admitted with enlarging, painful gluteal mass. Ct scan showed a well defined soft tissue mass without any relation to the bone. Microscopic examination of the slides taken from the tumor revealed histologic features of dedifferentiated chondrosarcoma composed of a low grade chondrosarcoma and an angiosarcoma component. The pictures taken from the specimen shows the features of this rare tumor.

Keywords: Chondrosarcoma, Soft Tissue, Dedifferentiated
Prophylactic Ciprofloxacin after Chemotherapy with Intermediate Infection Risk an Iranian Cross Over Clinical Trial

Shahid Beheshti University of Medical sciences, Mashhad University of Medical Sciences

Introduction: bacterial infections are major causes of morbidity and after chemotherapy treatment for cancer. Iranian patients healthcare are different from developed countries and antibiotic over prescribed in our country so we decided to do this study to compare the results of studies that have been done in developed counties.

Method and material: in a prospective cross over clinical trial 51 patients with confirmed malignancy were entered. patients were on 500 mg ciprofloxacin every other cycles of chemotherapy from first day until the next cycle of chemotherapy. Primary end point was documented fever detected by oral tempter more than 38 c°.

Results and conclusion: the mean age was 40±13 years. 33% were male and 67% were female. 52% had breast cancer and 48% had hematologic malignancies. 174 cycles of chemotherapy were injected. Fever was detected in 6.8% of cycles that ciprofloxacin was given and in 17.5% in cycles without ciprofloxacin (.p=0.04).Although some studies in developed countries showed effectiveness of prophylactic antibiotic but our study confirmed this effect even in developing countries with over prescribed antibiotic.

Key words: Chemotherapy, Ciprofloxacin, Fever, Prophylaxis

Comparison of Gabapentin and Metoclopramide for Prevention of Delayed Onset Chemotherapy-induced Nausea and Vomiting: a Randomized Open Label Clinical Trial

Shahid Beheshti University of Medical sciences

Background: Chemotherapy-induced nausea and vomiting (CINV) is an important side effect of chemotherapy. There are few studies that have showed gabapentin effect on CINV. In this trial we compared gabapentin with metoclopramide in prevention of delayed CINV.

Methods and materials: in a open-label randomized clinical trial patients candidate for treatment with moderately emotive chemotherapy were randomized in tow groups to receive 10 mg metoclopramide or 200 mg gabapentin 3 times per day from days 2 to 5. Granisetron and dexamethasone were injected to all patients. primary end point was incidence severe nausea and total number of vomiting during days 2 to 5.

Results: 50 patients were enrolled in the study received 217 courses of chemotherapy. Demographic data was the same between tow groups. Incidence of severe nausea was 11/108 in gabapentin group and 8/109 in metoclopramide (p=0.9). There was no significant difference between number of vomiting in tow groups (0.49±103 VS 0.55±1.8 p=0.8). Severity of acute onset CINV was the same in tow groups.

Conclusion: gabapentin is not inferior to metoclopramide in prevention of delayed CINV.

Key words: Gabapentin, Chemotherapy, Vomiting, Nausea

Splenic Sequestration Crisis

Jalaeikhoo H., Keyhani M.

First hospital admission of 20 years old male known case of sickle thalassemia transferred from another hospital with impression of acute leukemia. He was well until one week PTA when he developed R-knee pain
and gradually experienced generalized bone pain. Referred to hospital and was admitted. Results of laboratory test at the time of admission were:

WBC=7100, BUN=27, BS=142, HB=12.1, CREA=0.6, Na=141, PLT=72000, Ca++=9.1, K+=4.4, MCV=67, PO4=4.5, PT=19.5, INR=2.3

He gradually developed dizziness, fever and episodes of epistaxis and pallor.

Results of laboratory tests 4 days after admission were:

WBC=34100, LDH=3353, CPK=142, Hb=4.5, Plt=28000

Abdominal sonography revealed gallstone and huge splenomegaly.

BMA: suggestive of acute leukemia.

He transfused 4 units of packed RBC and 7 units of platelets.

Dexamethazone: 8 mg BID, Ciprofloxasine: 200mg IV q 12h, Ceftriaxone: 1mg IV q 12h, Allopurinol: 100mg q 8h started for the patient. At 6th hospital day he transferred to our hospital with impression of acute leukemia.

FH: father has sickle cell trait and mother has thalassemia minor.

On physical examination patient was pale, Bp: 90/70, PR=120, Temp=38.5, RR=20

Positive finding at time of admission were: pallor, mild jaundice, huge splenomegally no petechia or purpura.

Vancomycin, imipenem started for patient. Results of BMA and BMBX showed extensive necrosis of BM and many degenerated cells. Flowcytometry was: normal

WBC=31100, PARVO VIRUS B19 IGM= NEGATIVE, HB=9.8, COOMB’S TEST= NEGATIVE, PLT=57000, G6PD= NEGATIVE, RETIC=1%, LDH=5000

CT of abdomen showed huge splenomegally and multiple S.O.L in spleen suggestive of infarction.

Splenectomy and cholecystectomy was done at 10th day of hospital admission.

We will discuss this interesting case and differential diagnosis for him. He suffered from splenic sequestration crisis a rare type of crisis in sickle cell disease and sickle thalassemia.

Keywords: Sickle Thalassemia, Splenic sequestration crisis

Primary Lymphoma of Liver Mimicking as Metastatic Tumor on Image Study but Complete Response to R-CHOP, Report of Two Interesting Cases

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The liver usually involves in the setting of systemic lymphoma, and it is predictable that Primary Lymphoma of liver is a rare disease, can be seen with hepatitis C virus infection, immunodeficiency virus and other immunocompromised states, also in autoimmune disease.

The case one -is a seventy years old a known patient of rheumatoid arthritis, presented with six months history of vague abdominal pain fever, chills and weight loss and hepatomegally. The laboratory data showed mild anemia and the sonography was in favor of multiple metastatic lesions. The biopsy confirmed CD20 positive diffuse large cell none Hodgkin’s lymphoma. After six courses of Rituximab and CHOP, he is controlled and disease free upto one year of the treatment.

The Case two-A forty years old woman presented with chronic vague abdominal pain and hepatomegally. the only positive imaging finding was an ill-defined mass in the computerized tomography in the abdomen, So she as a case of liver tumor explored, the tumor was unresectable but biopsy of the lesion was in favor of the CD20 positive lymphoma with six courses of R-CHOP, she is controlled after one year of the treatment course. In both two cases there was no evidence of systemic disease in favor of a nodal lymphoma.

Discussion: these cases denotes that for the diagnosis of lymphoma of liver it needs to have a special diagnostic suspiciousness, adequate tissue sampling, and a complete immunochemistry is mandatory to reach this goals. As we know the primary lymphoma of liver can be a treatable disease opposite to metastatic carcinoma or other liver tumor which are not usually not so much curable therefore to see every type of liver tumor a precise histopathology is needed to exclude of lymphoma of liver and imaging is not enough.

Keywords: Primary Lymphoma of Liver, R-CHOP
High Dose Chemotherapy and Autologous Stem Cell Transplantation in Germ Cell Tumor

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High dose chemotherapy in refractory germ cell tumor is controversial but it is recommended in relapse or tumor marker positive tumor/negative patient.
During the past two years 2 patients with germ cell tumors (Non seminoma) after two different chemotherapy regimens with BEP and Tip still had elevated tumor markers.
Another patient with elevated tumor markers after two different type of chemotherapy regimen had residual disease.
They were treated with high dose carboplatin Etoposid and Ifosfamid and autologous stem cell transplantation All of them tolerated induction chemotherapy although one of them developed acute renal faluire. Finally in all patients tumor markers became normal and were discharged in good conditions.
Tumor markers in all of them were normal. There isn’t any residual disease in the third patient. The first patient was followed for one year and others for six months. They are in complete remission.
Result: High dose chemotherapy followed by autologous stem cell transplantation is feasible and the result is encouraging.

Keywords: Germ cell tumor, ASCT

Efficacy of Combination of Cisplatin and Gemcitabin in 43 Patients with Pretereated Metastatic Breast Carcinoma with Taxoter and Antracyclin in Tabriz

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Purpose: Breast cancer is a most common malignant disease in women and metastatic breast cancer seen in 10% of Iranian patient at presentation and 25-30% of patient due to 5 years after diagnosis. Cisplatin and Gemcitabin have single agent activity in metastatic breast cancer and preclinical data support synergy of this combination. In this terial we evaluate the response rate and response duration and toxicity of the combination of Cisplatin and Gemcitabin in pretreated metastatic breast cancer.
Patients and Methods: Eligible 43 women (with mean age 47 years (19-70 years) and karnofsky performance statous greater than 70% without renal dysfunction) had measureable disease and heavily pretreated metastatic breast cancer with taxoter and antracyclin. All patients received Cisplatin 80mg/m2 (due to 4 days ) and Gemcitabin 1000 mg/m2/d in day 1 and 8 of a 21 day cycle with prophylactic G-CSF therapy.

Results: OF 43 enrolled women; response rate in 35% (8% complet and 27% partial) and the median duration of response 5/8 month, respectively and response rate is higher in ER negative patients. Overal survival were 12/8 month. The most common grad 3 ,4 hematologic toxicity were thrombocytopenia (68% ) ,neutopenia (65%),anemia (35 %),other toxicities such as nause and vomiting in 69% and peripheral neuropathy in 16% of patients were seen.

Conclusion: Combination of Cisplatin and Gemcitabin is active in pretereated metastatic breast cancer with taxoter and antracyclin, and we recommended using of this regimen for pretreated patients with metastatic breast cancer with taxoter and antracyclin.

Keywords: Breast cancer, Gemcitabin, Cisplatin, Taxoter, Adriamycin
Efficacy of Neoadjuvant Combination Chemotherapy with Docetaxel and Epirubicin in 37 Patient with Inoperable Locally Advanced Gastric Carcinoma in Ostad Ali Nasab Hospital of Tabriz

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Introduction: Gastric carcinoma is a most common malignant disease in north west of IRAN and, unfortunately, most patient are in inoperable stage at time of diagnosis. This study aimed to evaluate the efficacy and safety of neoadjuvant therapy with combination of Taxotere and Epirubicin chemotherapy in 37 patient with inopatable locally advanced gastric carcinoma.

Patients and methods: 37 patient (23male ,14female with mean age59 year(21-70years) with pathological documented gastric cancer with measurable inoperable gastric cancer (staging studied with endoscopic sonography and abdomino pelvic spiral Ctscan) and good performance state (kf greater than70%) enrolled to study. The chemotherapy regiment considered of taxotere 75mg/m2 and epirubicin 80mg/m2 in first day and G-CSF5 microgram/kg/day in day 2,3,4/Q21days cycle. Hematological and biochemical evaluation performed throughout chemotherapy after 4 course of chemotherapy, restaging of patient with CT scan and endoscopic sonography, then patient with response referred to surgery with curative intent.

Results: After 4 cycle chemotrapy of patients achieved complet clinical and paraclinical response in 5 (12/5%) and partial response in 17(46%) and stable disease in 3 (8/11%) and progressive disease in 12 (32/45%), response to chemotherapy and down staging were seen in 23 (62/76%) of patient, and after surgery of these patient, curative surgery doned in 19 (51/35%), with complete patologic response in 4(10/8%), and palliative surgery done in 4 (10/81%) of patient. Grade 3, 4 hematologic complication seen in 17% (anemia), 41% (neutropenia), 39% (therombocytopenia).
Renal dysfunction or drug hypersensitivity is not found. Duration of followup were 18 month (4-58month) and patient with curative surgery had longer survival.

Conclusion: Neoadjuvant chemotherapy with taxotere and epirubicin have a potent activity for reduction of tumor bulk and down staging and supression of micrometastasis of gastric cancer and increased resectability of gastric cancer, then increased overall survival.

Keywords: Gastric cancer, Epirubicin, Docetaxel

Is the Usage of Daily Dosage of Vitamin D (400 iu ) and Calcium (1200mg) Sufficient in Premenopausal Women with Breast Cancer Undergoing Adjuvant Chemotherapy? (Study of 157 Patients in Tabriz)

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Purpose: Due to socially specific dressing and routine consumption of sun avoidance behaviors, vitamin D onsumption is a common women healthy problem in north west of iran. vit D onsumption is associated with increased breast cancer risk and decreased breast cancer survival. The purpose of this study was to determined the onsumption of vit D onsumption, as measurable by serum vit D (25-OH D) and calcium in 157 premenopausal women with breast cancer at initiation of adjuant onsumption for breast cancer and after 1 and 2 years of vit D and calcium supplemenation.

Patients and methods: The study included 157 premenopausal women [mean age 44years (19-52)] from the north west of Iran with stage 1-3 breast cancer who received adjuvant onsumption. All patient were prescribed vit D3 and calcium carbonate (400IU/d, 1200mg/d). At baseline and 12 and 24 months of treatment, blood was collected and analyzed (radioimmonoassy) in batches for serum 25-OH D (VIT D3) and calcium. Vit D onsumption was defined as serum vit D3 less than 20ng/ml, insufficiency as 20-29ng/ml and sufficiency as 30 ng/ml or greater, and lower limit of corrected calcium was 8/5mg/dl.In the end of first year, in patient with vitD onsumption and hypocalcemia, increased consumption of vit D 800 iu/day and calcium to 1500mg/day.
Results: At baseline 69% of patients were vit D onsumptio (31%sever D3 deficient and 38% vitD3 insfficient) and 32% hypocalcemic, after 1 year supplementation of vit D and Calcium (400iu/d ,1200mg/d) less than 19% of patients with vit D onsumptio achieved normal limit vit D3, and serum calcium normalized in 20% of hypocalcemic patient in baseline. In the end of second year of supplementation of vit D3 and calcium (800iu/d, 1500mg/d), vit D onsumptio in17% and hypocalcemia in 2% of patients not corrected.

Conclusion: Vit D onsumptio and hypocalcemia is highly onsumpti in women with breast cancer. The current recommended dietary allowance of vit D and calcium (400 iu/d, 1200mg/d) is to low to increase serum vit D greater than 30ng/ml and corrected serum calcium greater than 8/5mg/dl. We recommended, the onsumption of vit D increased to 800-1000 iu/d and calcium to 1500mg/day, for bone health and improved survival of patients.Because our results indicate clearly that vit D 400 iu/d and calcium1200mg/d has minimal efficacy in correcting this wide spread problem.

Keywords: Breast Cancer, vitamin D, Calcium, Premenopause, Chemotherapy

New Strategies Options in Management of GISTs

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Gastrointestinal stromal tumors or GISTs are the most common mesenchymal tumors (80%) of the gastrointestinal tract (1-3% of all malignant GI tumors). Until recently, they were often designated smooth muscle tumors of the GI tract– specifically, GI leiomyosarcoma, leiomyoblastoma, leiomyomas .In the past 12 years ,investigators have found that GISTs express the KIT(CD-117) receptor tyrosine kinase (in greater than 95% of patients and it is diagnostic) and CD34 positive (in 60-70% of patients and this is specific but not diagnostic) and PDGFR-a in many of patients .GISTs are thought to originate from the interstitial cell of Cajal, the intestinal pacemaker cell responsible for peristalsis. These tumors most commonly arise in the stomach (60-70%), small intestine (20-30%), colon and rectum (5%) and esophagus (less than 5%) and intraabdominal extra GI GISTs (omentum /retroperitoneum /mesentery ).Almost all GISTs have malignant potent .All GISTs ,except very small (<1cm) tumors, should be considered as having the potential for metastasis .The vast majority of GISTs metastases at presentation are intra abdominal , either to the liver , omentum , or peritoneal cavity .Metastatic spread to lymph nodes or to extraabdominal site is very rare (less than 2% to lungs ).The incidence of GISTs is approximately 15 cases per million population .and occurs predominatly in adults at the median age of 58 years , and the incidence is slightly higher in men than in women.

Presenting symptoms often represent the site of tumor origin, size of tumor, aggressiveness of tumor, and including abdominal pain, abdominal mass, nausea, vomiting, anorexia, weight loss, dyspepsia, and acute hemorrhage in to the intestinal tract or peritoneal cavity from tumor rupture (dependent on size of tumor). The diagnostic evaluation of suspected or proven GISTs is similar to that of other GI malignancy. Most GISTs arise below the layer of mucosa and grow in an endophytic fashion and can also make procurement of diagnostic tissue by endoscopy more difficult. Endoscopic ultrasonographically (EUS) guided assay and biopsy have added value in the detection of GISTs in the upper GI tract because of this growth pattern.

Differential diagnosis of GISTs: leiomyosarcomas (express smooth muscle actin and desmin, but fail to expressCD117) and schwannomas (positive S100 and negative for CD117). Fewer than 5% of GISTs are CD117negative but PDGFR A positive .Deletions of chromosomes 14 and 22 is common in GISTs. GISTs with no mutation of KIT or PDGFRA have the least chance of responding to IMATINIB.

Prognosis of GIST: The most reliable prognostic factors in GIST are the size of primary tumor and the mitotic index, site of primary GIST lesion (small bowel tumor with worse prognosis).

Diagnost imaging of GIST patients: 18FDG PET, CT, MRI, and EUS in UGI GISTs and PET-CTS CAN.

TREATMENT: Definitive expert surgery remains the mainstay of treatment for patients with localized, primary GIST. PET CT scan should be obtained prior to surgery to look for metastatic disease. Chemotherapy (effect less than 5%) and radiation therapy (few palliative effect) are less effective in GIST and not recommended. Adjuvant molecularly targeted kinase inhibitor therapy orKIT-targeted therapy (IMATINIB 400-600mg/day ) is recommended after complete surgery in high risk patients (recurrence greater than 90% in long term without adjuant therapy). Neoadjuvant imatinib therapy is recommended in specific patients for 2month, then is doing
surgery. There is no role for surgical resection in patients with multifocal recurrence. In management of metastatic, unresectable, or recurrent GISTs, the first choice is IMATINIB (400-800mg/day FDA approved in 2002), and the optimal duration of imatinib therapy remains somewhat uncertain, lifelong therapy ?!(For GIST patients who achieve any measure of disease control, continued dosing with imatinib as long as the disease is not progressive appears to be the optimal course of management). Contrast CT Scan are recommended every 3-6 month for 5 years after surgery in GISTs to sury for the developing of drug resistant. Efficacy of imatinib in GIST is near to 80% (5% CR, 45-50% PR, 25-30% STABILITY OF disease). Adverse events of imatinib therapy usually are mild (edema in 74%, diarrhea in 45%, nausea, muscle cramps, rash in 30%, musculoskeletal pain in 40%) and self limited, severe tumoral hemorrhage in less than 5% of patients. The median time of resistance to imatinib is 2 years from starting therapy in GISTs, (new KIT mutation?) and second line agents such as sunitinib (inhibits KIT and PDGFRa) is generally used. In patients with resistance to imatinib (fewer than 20% of cases) or intolerance to imatinib, other kinase inhibitor such as SUNITINIB (FDA approved in 2006) 37.5mg/day or 50mg/day continued for 4 weeks and 2 weeks resting for long term. With tyrosin kinase inhibitor therapy (IMATINIB-SUNITINIB), the median survival in metastatic GISTs is now 58 month.

Keyword: GIST

Age Pattern of the Occurrence of Breast Cancer in the Northwest of Iran

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Breast cancer represents 27% of the cancers and 19% of the cancer deaths in female population. The aim of this study was to document the age pattern of the incidence of breast cancer in Iranian female population in the northwest of country.

The study subjects were 1764 patients with breast cancer diagnosed/registered in the six university clinics/hospitals between 1988 and 2008 in the Northwest of Iran.

The highest rates were observed in 1930-39 (for 21-40 years old women), 1950-59 (for 41-60 years old women) and 1960-69 (for 61 years and more). The highest rate was observed in 1950-59 birth year cohorts (284.38 per 100000 female populations, CI95%: 260-310). This rate was statistically significant comparing to the similar rates of other birth cohorts. There was no statistically significant difference between various years in terms of the average age at the diagnosis of breast cancer in our study setting.

Despite the previous research reports, we found no significant difference between the mean ages at diagnosis of breast cancer from 1988 to 2008 in Iranian female population.

Keywords: Breast cancer, Age pattern, East Azerbaijan

A Case of Primary Gastric Cancer Concurrent with Esophageal Cancer

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Background: Association between primary gastric cancer and esophageal cancer was reported by Michio Maeta, et al in 1982. They treated 114 Japanese patients with primary esophageal cancer and found that 4.4% of them (5 patients) had simultaneous gastric cancer. In another Japanese study which was done by Hoichikato, et al in Tokyo 44 case (3.9%) of a total 1,137 patients with esophageal cancer had associated primary gastric cancer. In this study we want to present association of esophageal cancer and simultaneous primary gastric cancer in a 52 y/o Iranian male.

Case report: A 52 y/o Non-smoker male was admitted with dysphagia after eating solid foods, anorexia and weight loss since 2 months PTA. He also had history of 60 mi4ing and nausea after eating each meal. Upper GI
endoscopy revealed an Esophageal infiltrative tumoral lesion in the 30 cm from the incisura and an ulcerative infiltrative lesion in gastric antrum. Pathological findings included: well differentiated squamous cell carcinoma (SCC) of esophagus and poorly differentiated carcinoma of stomach. Metastasis work up revealed a large heterogenous 4×7 cm mass in upper pole of right-sided adrenal and further endocrinologic assessment for excluding primary tumor of adrenal before biopsy of this mass was performed and results were pending.

Result: In this case an association between primary gastric and esophageal cancer was seen in an Iranian man. Conclusion: We suggest careful evaluation for gastric cancer before surgery for esophageal cancer.

Keywords: Gastric Cancer, Esophageal Cancer

Survival Analysis of Patients with Gastric Adenocarcinoma

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Objectives: In this report, the epidemiology, distribution of disease as well as prognostic factors, and the effect of multimodality treatments on mortality and survival of patients with gastric adenocarcinomas, who were referred to Tehran Shahid Fayaz-Bakhsh Hospital from 1996-2003, were studied.

Patients and Methods: One hundred gastric cancer patients with adenocarcinomas pathology who had been operated and chemoirradiated at the Shahid Fayaz-Bakhsh Hospital in Tehran between 1996 and 2003 as a historical cohort study and were analyzed. The patients' life expectancy after surgery and its relationship was assessed with age, gender, disease stage, and cancer site, type of treatment, disease histology, and presence of liver metastases variables. For analysis of dataset, methods of Kaplan Meier, Cox Proportional hazards model and Breslow estimator were used. The SPSS13 software used to analysis and an alpha level significant was considered, 0.05.

Results: 73 percent of patients were men and others were women. The mean age at men was 63.3 years and women were 61.7 years. In 31 percent of cases, tumors observed at cardiac location and in 20 percent of cases were observed at antrum location. In total, more than half of tumors reported in proximal location. Liver metastasis was detected in 25 percent of cases, and in 13 percent of cases were presented by peritoneal seeding. Only 9 patients were referred at early stage and 54 percent of patients were referred at locally advanced stage and 37 percent of patients were referred at metastasis stage. In 32 percent of cases, pathological reports were reported intestinal and in 54 percent of cases were reported diffuse. There was not significant relationship between gender and disease histology (p=0.167). The most common chemotherapy agent was 5FU based regimen. The seven-year survival rate and the median life expectancy in the studied patients were 17.2% and 14.2 Months, respectively. The median life expectancy for the patients with locally advanced stage and metastasis were 18.2 and 8.3 months, respectively; and for patients with and without surgery was equal to 17.7 and 14.2 months, respectively; and for disease histology with intestinal and with diffuse were equal to 14.2 and 13.2 months, respectively. The Cox proportional hazards model showed that disease stage and age with life expectancy had a significant relationship (p<0.01 and p=0.04 respectively).

Conclusion: Most of patients were diagnosed at locally advanced stage or metastasis stage (in the late stage). One of the most important reasons for low survival rate of Gastric cancer patients seems to be delayed consultation and diagnosis. So, At this necessary to employ mass media for extensive public education about the early warning signs of the disease and performing periodic examinations.

Keywords:

Outcome of Acute Myeloid Leukemia in an Iranian Medical Oncology Center

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Background: Despite important progress in the treatment of acute myeloid leukemia recently, the majority of patients die from this disease. However, progress in therapy and supportive care over the last decades has led to improvement in the therapeutic results especially in patients up to 60 years old.

Method: From 2005 to 2009 a total of 205 patients with diagnosis of acute myeloid leukemia admitted in TALEGHANI hospital and 156 of them were treated with conventional 3+7 (IDA + CTTA) chemotherapy regimen.

Result: In this survey we study the complete remission rate, induction mortality rate, refractory rate and some other aspect of chemotherapeutic results in these patients. The our results were 60% complete remission, 25% refractory and finally 15% induction mortality rate. Comparison of this survey with other same study showed that this results is acceptable but required more improvement in AML treatment in our ward for obtained the better results.

Key words: acute myeloid leukemia, outcome, remission

Autologous Stem Cell Transplantation in Relapsed Lymphoma Patients with Residual Disease

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High dose chemotherapy with stem cell rescue is the standard treated of lymphoma in second or subsequent complete remission. Despite of good response (more than %50 reduction in tumor size) in a considerable amount of patient's residual disease persists. We evaluated the efficacy of high dose chemotherapy with stem cell transplantation in this group of patient.

During 2 years from Sep 2007 to Sep 2009 14 patients with relapsed Hodgkin or non Hodgkin lymphoma in second good or subsequent partial remission enrolled in this study 10 of them were heavily treated before.

Patients received CEAM chemotherapy as conditioning regimen and despite repeated previous chemotherapy mobilization was feasible and stem cell transplantation was performed without significant complication. Patient followed for a mean of 21 + 11 months. 7 patients are in complete remission 4 in stable disease and in 3 patients progressive disease was seen and resulted in death in one patient.

Result: Autologous stem cell transplantation is feasible in heavily treated relapsed patients with residual disease and the result is encouraging.

Keywords: Lymphoma, ASCT, residual disease

Activation of cAMP Signaling Inhibits DNA Damage-induced Apoptosis in pre-B ALL Cells through Abrogation of p53

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Objective: The p53 tumor suppressor protein is a potent roadblock to tumor development. Cells that are insulted by chemotherapeutic DNA-damaging agents or other forms of stress stabilize the p53 protein by phosphorylation or other modifications. Stabilized p53 accumulates in the nucleus to regulate the expression of numerous pro-apoptotic genes. We evaluated the effect of cAMP signaling pathway, an important regulator of hematopoietic cell proliferation, differentiation and apoptosis, on p53 protein in response to a DNA-damaging agent.

Patients (materials) & methods: Cultured pre-B ALL Nalm-6 cells were exposed to doxorubicin in the presence or absence of cAMP-increasing agents for 24h and then cells were subjected to apoptosis analysis by flow-cytometry. Western blot method was used to analyze phosphorylation state of p53 protein, total p53, and the
levels of other proteins which were involved in doxorubicin-induced apoptosis. Real-time PCR was performed to analyze the expression levels of the wild-type p53-induced phosphatase 1 (Wip1).

Results: These results indicate that elevation of cAMP in B cell precursor acute lymphoblastic leukemia (BCP-ALL) cells profoundly inhibit the apoptotic response to doxorubicin. We further demonstrate that this effect depends on the ability of elevated cAMP levels to quench DNA damage-induced p53 accumulation by changing posttranslational modifications of tumor suppressor p53 protein. Increased cAMP levels also shifted the ratio of the death promoter to death repressor genes via alteration of Bcl-2 and Bax proteins expression.

Conclusion: On the basis of our findings we suggest that cAMP levels may influence p53 function in malignant cells that retain wild-type p53, potentially affecting p53 both as a tumor suppressor during cancer initiation and maintenance, and as an effector of the apoptotic response to DNA-damaging agents during anticancer treatment.

Keywords p53, cAMP, Apoptosis, Doxorubicin

Parasitic Granulomatosis Infection (Balantidiasis) Mimicking Lymphoma

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Introduction: Sometimes infection disease presents with toxic appearance and mimicking lymphoma. We report an 18-years-old boy who present with complaints of high fever and diarrhea. In work-up he has aortic lymphadenopathy, elevated ESR, anemia, pleural effusion and hepatosplenomegaly, so he candidates for diagnostic laparotomy and biopsy and Pathologist reports parasitic granulomatosis infection highly suggestive Balantidiasis.

Case presentation: An 18-years-old boy was admitted to our center (Alzahra University Hospital, Isfahan, Iran) with complaints of high fever and diarrhea. Eight days before admission, the patient began pain in the right upper quadrant of abdomen and accompanied with frequent, painful and bloody stools. Temperature peaked 40.3°C with rising ESR (92mm/hr). His temperature in admission was 39.5°C, blood pressure was 90/60 mm Hg, heart rate was 110 / minute, respiratory rate was 40 / minute. Erythema nodosum was seen on both legs. Wright agglutination test, blood and stool cultures were negative, Serologic tests for toxoplasma, human immunodeficiency virus (HIV) types 1 and 2, hepatitis B surface antigen, and antibodies against hepatitis C virus were negative, and PAS staining for fungal infection and Zeil-nelson for TB were negative. PPD was negative. Spiral CT Scan of the abdomen and pelvis confirmed hepatosplenomegaly and multiple small hypodense lesions in both lobe of the liver and the spleen. Also there was bilateral pleural effusion and large para-aortic lymph nodes. Skin biopsy showed an acanthosis with spongiosis in epiderma and perivascular infiltration of neutrophils was seen consistent with leukocytoclastic vasculitis. Because of progressive course of disease extended antibiotic was started and diagnostic laparatomy was done .Biopsies taken from spleen, liver and omentum revealed several granuloma composed of central suppuration surrounded by macrophagic zone and outer lymph mononuclear leukocytes and multinuclear gaint cells and palisading granuloma. The bone-marrow was not consisted with lymphoma. Pathologist recommended the diagnosis of parasitic granulomatosis infection, more probably Balantidium coli with abscess formation, peritoneum, liver, and spleen involvement. All antibiotics (no response to them) were discontinued and doxycycline was administered and the patient had dramatic response after 48 hours to doxycycline. Doxycycline continued for 2 weeks. Patient was followed for 1 year. He is in good condition and control CT revealed clearance of all the former lesions in spleen and liver. All the follow up control laboratory is normal.

Discussion: We report the case of a patient with fever, aortic lymphadenopathy, hepatosplenomegaly, elevated ESR, anemia related to Balantidiasis. This diagnosis was supported by positive results of tissue biopsy and progressive improvement after treatment with doxycycline. Malignancy was suspected initially particularly lymphoma, but extensive investigations failed to demonstrate any neoplasm. Because of negative findings, a parasitic infection was considered. B. coli is the largest and only ciliate protozoan that infects humans. Although Balantidium coli infection of humans is rare, it is most likely to occur in places where humans and pigs live in close contact. Infection has also been observed in non-human primates, and rodents have been
experimentally infected. The infection is most frequently acquired by ingesting food or water contaminated by pig faeces, and it may be asymptomatic or may cause acute diarrhea. Common symptoms of Balantidiasis include chronic diarrhea, occasional dysentery, nausea, foul breath, colitis, abdominal pain, weight loss, deep intestinal ulcerations, and possibly perforation of the intestine. The acute, bloody and mucoid form of infection may be mild, severe or fulminating with numerous trophozoites in stools. The chronic form presents as intermittent episodes of diarrhea. Left untreated, fulminating acute Balantidiasis is reported to have a case fatality rate of 30%. Parasite invasion can extend to the appendix and ileum, or it may involve some extra digestive locations such as mesenteric lymph nodes, peritoneum, liver or lung. The parasitological diagnosis can be established by repeated microscopic examination of fresh stool samples and of tissue scrapings obtained during endoscopy.

Conclusion: Balantidiasis is usually a benign and self-limited condition but fulminating acute Balantidiasis is reported. Diagnosis of Balantidiasis is often difficult in adults, requiring a high index of suspicion. Although there are few reports about Balantidiasis presenting with systemic disease, in patient with complain of fever, lymphadenopathy, hepatosplenomegaly and weight loss mimicking lymphoma, we should consider parasitic granulomatosis infection (i.e. Balantidiasis) in differential diagnosis.

Keywords: Balantidiasis, Lymphoma, Leukocytoclastic vasculitis

Taxan Based Regimen as a Risk Factor for Chemotherapy Induced Amenorrhea (CIA)

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Objective: Study design was so to show the impact of chemotherapy on induction of amenorrhea (CIA) in premenopausal women with breast cancer in all ages.

Material and methods: This is a follow-up study in 226 premenopausal women with breast cancer, median age of 40 yrs (26-56 yrs) who received one of the three groups of chemotherapy regimens: Conventional (CMF), antracycline based, and anthracycline-taxan based. They were evaluated for CIA in the follow –up clinic of ICBC. Statistically analysis using SPSS software was performed and logistic regression was used to determine the risk factors of CIA.

Results: From 226 patients who entered the study, 154 patients (68.1%) were developed CIA, which in 101 patients (65.6%), CIA was established and never resumed. CIA was present in 52.5% of patients treated with conventional regimens (CMF), in 66.7% of patients treated with anthracyclines and in 78.7% of patients treated with anthracycline-taxan (p=0.015). Although a slightly superior incidence of CIA in patients with hormone-insensitive tumors (ER- and PR-) versus hormone-sensitive tumors (ER+/or PR+) treated with combination regimens was observed, no statistically significant difference was found (p=0.629). From all risk factors that evaluated, anthracycline-taxan based regimen (OR: 4.1, CI95%:1.6-10.2) and age>40 yrs (OR: 3.2, CI95%: 1.7-6.1) were the most important factors in developing CIA in the study.

Conclusion: Type of chemotherapy and age at the breast cancer diagnosis are the most important risk factors in CIA.

Key words: chemotherapy induced amenorrhea, Taxan, Breast cancer

Capecitabine plus Oxaliplatin (XELOX) versus 5-Fluorouracil/Folinic acid plus Oxaliplatin (FOLFOX-4) as First-line Therapy in Adjuvant Colon Cancer: A Cross- sectional Study.

Najafi S., Janbabaee G., Paiandeh M., Shojamorady Sh., Erfani S., Ebrahimi M.
Background: To describe the treatment results of capecitabine plus oxaliplatin (XELOX) versus 5-fluorouracil/folinic acid and oxaliplatin (FOLFOX-4) as first-line therapy in adjuvant setting in patients with colon cancer.

Patients and methods: This is a retrospective multicenter cross-sectional study in which 99 Colon cancer patients who received XELOX or FOLFOX-4 as their first-line adjuvant chemotherapy were classified according their stage of disease at diagnosis and the follow up results.

| Table 1: Distribution of the stage between two treatment groups |
|------------------|------------------|
|                  | XELOX            | FOLFOX          |
| Stage            |                  |                  |
| II low risk      | 0 (2.3%)         | 1 (2.3%)        |
| II high risk     | 19 (35.8%)       | 16 (36.4%)      |
| III a            | 20 (37.7%)       | 10 (22.7%)      |
| III b            | 14 (26.4%)       | 17 (38.6%)      |

Results: All together from 99 patients, 51.5% was male and 48.5% was female, Karnofski score (KS) at presentation in nearly all patient was greater than 75 (98.9%). Tumor location was 72.2% at descending and sigmoid colon, 22.2% in ascending and 5.1% in transverse colon. Oncologists had to reduce the dose on 7.4% of XELOX group but on 25% of FOLFOX. Treatment-related grade 3/4 adverse events occurred in 50% of XELOX- and 65% of FOLFOX-4 treated patients. Whereas neutropenia were more common with FOLFOX-4 (15.2% with XELOX versus 25% with FOLFOX), grade 3/4 diarrhea (67.4% versus 12.5% with FOLFOX-4) and grade2/3 hand–foot syndrome (32.6% versus 2.3%) and grade1/2/3 peripheral neuropathy (100% versus 68.7%) were more common with XELOX.

Metastasis occurred in 16.6% with XELOX after 7.3 months and 20% in 8.6 months with FOLFOX.

Conclusion: It seems side effects of XELOX regimen is lesser than FOLFOX therefore dose reduction is less necessary, and more patients can successfully take the full course of therapy with XELOX. It is time to run a multicentre randomized trial to show the efficacy and survival advantage of each regimen.

Key words: Capecitabine, FOLFOX-4, Colorectal cancer, XELOX

Impact of Triple Negative Phenotype on Breast Cancer Epidemiology in Iran

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Background: Immune Histochemistry (IHC) analysis has identified four breast cancer subtypes, ER+/PgR+/Her2- (HR+/Her2-), ER+/PgR+/Her2+ [triple positive (TP)], ER-/PgR-/Her2- (TN), and ER-/PgR-/Her2+ (HR-/Her2+). Triple negative (TN) breast cancer is an aggressive disease with much epidemiologic specificity. We examined the prevalence of breast cancer subtypes within Iranian patients and determined the association of epidemiologic factors (BMI, Age, parity, pathologic grade and stage at presentation) within the subtypes.

Patients and methods: Immunohistochemical surrogates for each subtype were applied to 361 incident cases of invasive breast cancer from the Iranian Center for Breast Cancer (ICBC) (ascertained between May 2005 and December 2008), a cross-sectional study that sampled all patients who came to our center during this period of time. Subtype definitions were as follows: (1) HR+/Her2- (n=177,49%), (2) TP (n=76,21%), (3) TN (n=62,17%), and (4) HR-/Her2+ (n=46, 13%).

Results: The TN breast cancer subtype was significantly younger than HR+/Her2- group (mean age 40 vs 47, P=0.04). And compared with other subtypes presents with higher pathologic grade (P=0.01). parity also significantly less prevalent in TN than the HR-/Her2+ and HR+/Her2- groups (P =0.03, P=0.05 respectively).

Conclusion: Triple negative breast tumors occurred at a higher prevalence among younger patients compared with HR+/HER2- patients in this study. They are also having less parity and higher pathologic grade at presentation.

Key words: Triple negative, breast cancer, immunohistochemistry
Genetic Consultation in Breast Cancer Patients

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Background: Between the risk factors of breast cancer the most important one is family history, many experts believe that 10 to 15 percent of breast cancers are hereditary. Today there are criteria (NCCN 2008) which are showed whose patients need genetic consultation, and then may BRCA1 and BRCA2 testing.

Methods: This is a cross sectional follow up study in 1157 patients with breast cancer to show how many of them have the NCCN criteria for genetic counseling. The records of these patients are present in the clinic of Iranian Center for Breast Cancer (ICBC) and have been followed continually for ten years. Their data recorded in a questionnaire and properly analyzed statistically.

Results: Age at diagnosis was less than 40 years in 32 percent of patients. 10 percent of them had breast cancer before 50 years old but with strong family history of breast and ovarian cancer, 1.5 percent of them had more than two relatives with breast or ovarian cancer and 0.5 percent were male. From all of the patients who had breast cancer, 397 patients have at least one of the above criteria.

Conclusion: From 1157 patients, 397 patients (34%) had one of the NCCN criteria for genetic consultation. It means almost one third of breast cancer patients need genetic consultation. In other similar studies all over the world from one third to one fourth need genetic consultation. So every breast cancer clinic should equip with well trained genetic group.

Key words: Genetic consultation, breast cancer

The Relationship between Immunological Markers, Disease Free Survival and Overall Survival in Acute Myeloid Leukemia in North-West of Iran

*Tabriz University of Medical Sciences*

Background: Acute myeloid leukemia (AML) is a clonal disease characterized by heterogeneous involvement of hematopoietic bone marrow cell populations. In AML patients, a variety of clinical and biologic parameters, including surface markers, have been examined for potential value in predicting treatment response and survival.

Objective: By checking the myeloid, lymphoid and nonspecific markers on the blasts, we tested the hypothesis which the disease free survival and overall survival in AML could correlate with the expression of them.

Method: The immunophenotyping was performed by multiparameter flow cytometry (FACS Calibur flow cytometer, Becton Dickinson). The prognostic significance of 16 antigens is taken separately in 207 adult AML patients. we applied statistical software of SPSS-13. In this analysis, we compared DFS and OS with each of the surface markers existence.

Results: We could just find significant correlation in 4 of these markers. Those patients possessed CD3+ blasts, had better overall survival (P=0.027). In contrast in CD33+ patients, this parameter was worse (P=0.043). Disease free survival in CD15+ patients was higher (P=0.036) but in CD34+ cases, it was significantly lower (P=0.001).

Conclusion: This study suggests that an independent role of surface markers in the prognosis and response to treatment in AML is a fact which should be paid much more attention and applied it in the management of these patients.

Keywords: Acute Myeloid Leukemia, Disease Free Survival, Overall Survival, Surface Markers
Determination of Warfarin Dose Requirement in Thrombotic and Embolic Disorders in Iran

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Objectives: Warfarin is one of the most commonly used drugs in the treatment and prevention of thrombotic and embolic disorders. One of the most important side effects of warfarin is bleeding that has a close association with its dosage. As this is affected by multiple factors such as genetic, racial background, other drugs, background illness, age, sex. We decided to study dose requirements of warfarin in Iranian patients.

Methods: In this study, 150 patients from several parts of Iran with thrombotic or embolic events were selected and after consideration of including and excluding criteria, they enrolled in the study and received warfarin. We recorded their PT and INR regularly until their INR reached 2-3. And after three INR between 2-3 we recorded their warfarin dose. Body weight, height, and BMI, sex, drugs and their background illness were recorded.

Results: A total of 150 patients were studied (75 male, 75 female). Mean warfarin dose was 4.11±1.52 mg. Mean warfarin dose for men was 4.29±1.49 mg and for women was 3.94±1.55 mg. The mean age of patients was 49.99±15.36 years. The mean BMI was 24.43±4.34. There was no association between dose of warfarin, age and sex on the other hand no association between BMI and dose of warfarin.

Conclusion: With considering the results of this study we conclude that BMI and sex have no effect on warfarin dosage and that anticoagulation with warfarin in Iranian patients should be started with lower doses and its increments should be cautious.

Key Words: Warfarin, thrombotic and embolic events, PT

Evaluation of Response to Arsenic Trioxide in Patients with Refractory Multiple Myeloma

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Background: Multiple myeloma is a plasma cell dyscrasia characterized by proliferation of plasma cells in bone marrow associated with the production of monoclonal immunoglobulins or M-protein. Nowadays, current treatments for this disease include bone marrow transplantation and the use of alkylating agents, other chemotherapy drugs such as antracyclines and also corticosteroids. In recent years, the use of an old medication, arsenic trioxide, formerly approved for treatment of acute promyelocytic leukemia has been considered for myeloma treatment. Initial studies have shown an apoptotic and growth inhibitory effect of arsenic trioxide on myeloma cells. This study was designed and carried out to evaluate the efficacy and possible side effects of ATO on patients with refractory multiple myeloma.

Methods and materials: This study carried out on myeloma patients whose diseases were at least refractory to two standard treatment regimens. Arsenic trioxide was administered as an intravenous infusion at a dose of 0.25 mg/kg/d for 5 d/week during the first 2 consecutive weeks of each 4-week cycle with 2 week rest. Patients who completed one 4-week cycle were evaluated for response to treatment.

Results: 12 patients with median age of 63 years and with refractory disease to conventional treatment regimens, received arsenic trioxide. 10 patients tolerated at least one treatment cycle. Evaluation of response to treatment was possible only in 4 patients in whom the disease was stable. 2 patients died during second cycle of treatment. At the end of third cycle one patient had more than 50 percent decrease in serum protein electrophoresis. Only one patient could complete 6 cycles of treatment. During treatment, some adverse effects such as increase in liver enzymes, progressive increase in serum creatinine and neutropenia; also, mild side effects including pruritus, nausea and vomiting, lower extremities edema and noninfectious diarrhea were observed.

Conclusion: The use of arsenic trioxide is promising in treatment of refractory multiple myeloma and the likelihood of response will be more great if increased number of chemotherapy are used. Albeit, more
researches with larger sample size will give more success. Therapy was well tolerated and serious adverse events were observed to a lesser degree.

Key Words: Arsenic Trioxide, Refractory to Treatment Multiple Myeloma

**Relationship between the Time of Engraftment and Number of Courses of Chemotherapy before Autologous Stem Cell Collection in Heavily Treated Patients**

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Adequate stem cell collection in heavily treated patients is sometimes a disappointing problem. For this reason we add chemotherapy regimen or increase the dose of growth factor during mobilization in heavily treated patients.

We collected stem cells in second day if they weren't adequate in the first. In this study we compared the time of engraftment in patients in there second remission with patients in there third or subsequent remission.

During September 2007 to September 2009 we enrolled 30 patients with Hodgkin or Non Hodgkin lymphoma (17 in second remission and 13 in third or subsequent remissions). We took MNC>4 ×10^8 /Kg from all of them .Engraftment was defined as neutrophils reaching 500/µl for there consecutive days and platelets reaching 20000/µl.

We administered GCSF 5µg/Kg frome the first day of stem cell transplantation.

WBC engraftment was 14.8 and 12.9 and platelet engraftment 17.3 and 19.7 in first and second arm consequently than there wasn't significant statistical difference between the two arm.

In heavily treated patints stem cell collection is difficult but function of stem cells doesn't change and engraftment doesn't delay in these patients.

Keywords: Lymphoma, ASCT, chemotherapy

**Soft Tissue Infection as Early Manifestation of Hairy Cell Leukemia**

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Case report: a 60 y/o male known case of Diabetes mellitus and Hypertention admitted with sore throat odynophagia and right thigh swelling. Physical exam showed a toxic appearance, pharyngitis and petechia, swelling,erythema, edema ,tenderness in right thigh(Figure-1) and massive splenomegaly. Laboratory findings were: Blood sugar=700,Cr=1.65,Urea=70 WBC=1700,Hb=5.7,MCV=85,PLT=60,000 Albumin= 3, Ca=6.5,ESR=90,Prolonged PT,PTT,Rised D-Dimer. Total Bilirubin=16,Direct Bill=11.He had Mild hyper transaminasemia and elevated LDH. Doppler sonography of right thigh rolled out DVT. In Left thigh graphy and CT scan he had only soft tissue swelling without sub-cutaneous emphysema or abscess formation .Abdominal ultrasound revealed hudge splenomegaly (span=24mm). Serologic tests for HBS Ag,HCV Ab and Coomb’s test(Direct&Indirect) all were negative. Blood cultures were negative Echocardigraphy:normal Chest X Ray:normal In peripheral blood smear he had many intermediate size lymphocyte with hairy projection.Bone marrow aspiration showed diffuse hairy cell infiltration and Bone marrow biopsy revealed typical fried-egg appearance. We started Hydration,wide spectrum Antibiotics and Insulin regular infusion.Right thigh swelling was diminished and PT,PTT,BS,Cr and Bill and AST,ALT were normalized. In hospital course he find palpable purpura and petechial lesions on upper and lower extremities and erythematous patches on abdomen and trunk and right knee joint inflammatory arthritis(Figure-2,3).
Serologic tests for CANCA, PANCA, ANA all were negative. Skin biopsy showed peri vascular lymphocytic infiltration. Synovial fluid culture was negative and Cytology was showed PMN dominancy. After controlling the infection he was treated with a 2-CDA (0.1 mg/kg x 7 day). After chemotherapy WBC dropped to 700 and G-CSF was started. In hospital course he developed dyspnea and productive cough. Sputum culture revealed Klebsiella which was resistance to all ABs. After rising WBCs Count to 1700-2000 he developed localization of infection and abscess formation and sub-cutaneous emphysema in his right thigh which was confirmed with Imagings. Wide spectrum ABs were continued and surgical debridment was done. 3 week after chemotherapy he achieved hematologic remission with WBC=7500 (PMN=70%, Lymoh=30%). Hb=9.3, PLT=167000. Right thigh infection resolved and he discharged with oral Clindamycin and ciprofloxacin and Cotrimoxazole.

Results: We present a case of hairy cell leukemia with life-threatening soft tissue bacterial infection which was resolved with surgicomedical therapy. In hospital course he developed vasculitic-like skin rash and inflammatory right knee joint arthritis which was resolved after chemotherapy with 2-CDA. Conclusion: Patients with Hairy cell leukemia are susceptible to pyogenic bacterial infection in soft tissues in addition to usual organisms. Hairy cell leukemia should be considered in any patient.

Keywords: Hairy cell leukemia, soft tissue infection

**Myelofibrosis due to secondary hyperparathyroidism in a case of celiac disease**

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Background: Myelofibrosis is reported in patients with primary hyperparathyroidism. It is also was reported in patients with secondary hyperparathyroidism due to end-stage renal disease or Vitamin D dependent rickets. We want to present a case of celiac disease and osteomalacia which leads to secondary hyperparathyroidism and myelofibrosis.

Case Report: An 18 y/o female admitted in hematologic department with pancytopenia and splenomegaly. She had positive history of chronic diarrhea since childhood and secondary amenorrhea. Physical exam revealed short stature, clubbing, splenomegaly and failure of development of secondary sexual characteristics. Laboratory data revealed: pancytopenia, White blood cells (WBC)=1400, Hemoglobin (Hb)=7.1, Mean corpuscular volume (MCV)=86, platelets count (Plt)=52,000, hypokalemia, hypocalcemia, hypophosphatemia, with marked rise in parathyroid hormone (PTH) level and normal serum albumin and Immunoglobulin A (IgA). Follicle Stimulating Hormone (FSH) and Lutensising Hormone (LH) were decreased. Alanine aminotransferase (ALT) was in normal ranges and Aspartate aminotransferase (AST), Alkaline phosphotase (AK Ph) and Direct & total Billirubin were raised mildly. Serum folate and B12 and ferritin levels were all decreased. Urine analysis and stool exam and thyroid function tests all were normal.

Anti-Endomyosal Antibody (IgA)=170 U/ml (High, Normal<10). Abdominal ultrasound revealed: Hepatomegaly, Hudge splenomegaly and portal hypertention. Peripheral blood smear: Anisocytosis, Poikilocytosis, Many macrocyte, Many Microcyte, Many tear drop, Hypochromia and hyper segmented PMNs. Bone marrow aspiration and biopsy revealed myelofibrosis. Upper GI endoscopy revealed fissuring in duodenal second part and biopsy showed marked mucosal flattening and villous atrophy.

Diagnosis of Celiac disease and secondary hyper parathyroidism which leads to myelofibrosis was made.

Results: In this case with celiac disease and osteomalacia which leads to secondary hyperparathyroidism we found increased in number of giant cells and osteoclasts in bone marrow and secondary myelofibrosis.

Conclusion: Patients with celiac disease and osteomalacia are susceptible to secondary hyperparathyroidism which may leads to myelofibrosis. Cases of celiac disease with pancytopenia and organomegaly should be evaluated for evidences of secondary hyperparathyroidism and myelofibrosis. It is required to searching for hyperparathyroidism in all patients with celiac disease and myelofibrosis.

Keywords: Celiac disease, Hyperparathyroidism, Myelofibrosis
Paclitaxel Induced Reversible Bells Pulsy in a Case of Ovarian Cancer

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Background: Peripheral sensory motor neuropathy is a well known side effect of paclitaxel. We want to present a case of paclitaxel induced reversible unilateral bells pulsy in a case of ovarian cancer.

Case Report: A 56 years old female was diagnosed with stage III epithelial ovarian cancer and after TAH and BSO and debulking surgery, systemic chemotherapy including standard dose paclitaxel and carboplatin was administered in 3 week intervals. After third cycle of chemotherapy she developed bilateral peripheral neuropathy and after the 4th cycle she developed unilateral left-sided bells pulsy. Brain imaging was done which was negative for tumoral involvement. We change her chemotherapy regimen to Taxoter and carboplatin and 3 week after changing regimen bells pulsy resolved spontaneously.

Results: In this case we saw event of unilateral reversible bells pulsy following bilateral peripheral neuropathy after 4 cycles of standard dose paclitaxel and carboplatin.

Conclusion: This experience demonstrates that unilateral reversible bells pulsy is one of the cumulative side effects of standard doses of paclitaxel therapy.

Keywords: Bells pulsy, Paclitaxel, Ovarian cancer

Spontaneous Tumor Lysis Syndrome in a Case of CLL

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Background: Tumor lysis syndrome (TLS) is a metabolic emergency and generally occurs after chemotherapy for high grade, rapidly growing Leukemia and lymphomas. CLL is a low grade lymphoproliferative disorder. TLS reported as an uncommon complication of different chemotherapy regimen such as fludarabine in patients with chronic lymphocytic leukemia (CLL). We want to present a case of CLL with spontaneous TLS.

Case report: A 60 years old male admitted with nausea and vomiting and anuria. Physical examination revealed splenomegaly. Laboratory findings revealed hyperphosphatemia, hyperkalemia, Hyperuricemia, high LDH level, renal failure with increased BUN and Cr level. Whole blood cell count was 100,000 (more than 80 percent lymphocyte), Hemoglobin was 9.3 and Platelets count was 103,000, Coomb’s Direct and In direct were negative. Peripheral blood smear revealed many smudge cells and many basket cells and more than 90 percent of WBCs were small sized mature lymphocytes which was compatible with CLL. Bone marrow aspiration and biopsy confirmed CLL diagnosis. We have not possibility of flowcytometry and immunphenotyping study in our department. we started hemodialysis, Alloporinol and forced dieresis with lasix and urine alkalization with sodium bicarbonate and hydration with saline containing fluids. Urineray out put was rised graduately and serum Cr was decreased from 7 to 1.3 over a period of 10 days. After recovery of acute renal failure we started chemotherapy for CLL.

Result: In this case with newly diagnosed CLL we saw Tumor lysis syndrome before starting chemotherapy.

Conclusion: Although CLL is a low grade lymphoproliferative disorder and tumor lysis syndrome was reported as a complication of chemotherapy in patients with CLL, in this case we found spontaneous tumor lysis syndrome in an untreated case of CLL.

Keywords: Chronic lymphocytic leukemia, Tumor lysis syndrome

Diagnosis and Frequency of flt3 Mutations in Pediatric and Adult Acute Leukemic Patients with Different Subtypes

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Background: The mutations in Flt3 gene as a member of the class III receptor tyrosine kinase including ITD and D835 lead to uncontrolled proliferation of leukemic cells and poor prognosis.

Aim: The purpose of this study was molecular diagnosis and frequency determination of these mutations in AML and ALL pts.

Methods: Blood or Bone marrow samples from acute leukemic patients with various FAB classification were obtained in hematologic and blood transfusion centers of Iran. The mutations of ITD and D835 of Flt3 gene in acute leukaemia patients was studied by PCR and PCR-RFLP respectively. Subsequently, PCR products of positive ITD confirmed by sequencing techniques.

Results: The median age of adult pts was 47 +/- 12 (range from 18-75) years and in pediatric acute leukemia was 5.5 +/- 1.6 (range from 1-17) years. There was no correlation between pts with mutation status and gender and age. A positive correlation with high presenting WBC > 20000/micl (58%) was demonstrated in flt3-ITD positive (p<0.05).

Flt3 ITD and D835 mutations occurred in 18% and 6% respectively in 101 adult AML pts. The highest frequency of ITD and D835 mutations (16% and 4% respectively) occurred within M3 subclasses and characterized by the t(15;17).

In 91 pediatric acute leukemia including 18 cases AML and 73 cases ALL, Flt3 mutations occurred in 7.7% and 2.1% respectively. The frequency of ITD mutations in AML found 23% with highest occurrence in M3 subclasses (11.2%) characterized by the t(15;17). The frequency of ITD mutations in ALL found 4.1% that occurred only in early pre B subclasses. The frequency of D835 mutations in AML found 23% with highest occurrence in M3 subclasses (11.2%) characterized by the t(15;17). The frequency of D835 mutations in ALL found 1.3% that occurred only in pre B subclasses. The sequencing of PCR products of ITD showed different insertions of nucleotides of ITD such as 27, 47 and 63 bp insertions which were in similar with those literature reported previously.

Conclusion: we demonstrated that the FLT3-ITD mutations are frequent molecular lesions in AML patients particularly in M3 subtype with T 15-17. Thus, these data provide a rationale for evaluation of inhibitors of Flt3 for induction therapy.

Keywords acute leukemia, FLT3, PCR-RFLP

واژگان

کلمات کلیدی: آمادگی گزارش، مورد آدنوکارسینوم سیگنت سل

بحث

در این مطالعه بررسی شد که در اکثر موارد خانم 16 ساله از نوع سیگنت سل بیماری دیده می‌شود. دکتر امینی در حالی است که در این دوره و سهایی از روستاهای اطراف مراغه، استان آذربایجان شرقی می‌باشد. بیمار با تأیید انسداد، مراجعه و تحت کولوستومی قرار می‌گیرد. بیمار انسداد کامل خم طحالی کولون با درگیری وسیع یکم، سلیک و پارانوتوکسین و مزردکولون عرض داشته، که در جریان زیادی درک این گزارش شد. در وقوع بیماری دکتر Ajani، در مورد اگر مصرف کننده رز کلسین تومور در موارد نشان می‌دهد و این مورد را تحت نیازی مثبت سیستم پالیاتیو 5-فلوروراسیل قرار می‌گیرد و موجب جهت انجام پالیاتیو یافته می‌شود که به توجه به وضعیت اموک رز کلسین تومور ممکن نشد و

نها ترمیم کولوستومی انجام گرفت. بیمار فعلا تحت درمان های تکمیل‌یاب است.
Keywords: Gastric cancer, signet ring

The Principle of Chemotherapy and Management in Pediatric

Basirpanah S., Bakhti O., Hosseini A., Zohdi M.

A pediatric cancer center must have the staff and facilities to ensure that the pediatric patient with cancer will receive the best care that is available for his or her diagnosis. The guidelines also include information sheets on a variety of subjects related to adult survivors of childhood cancer. Topics include emotional issues, finding appropriate health care after cancer, health promotion through diet and physical activity and health issues after childhood cancer. Specific medical issues such as eye problems, liver and bone health, hepatitis and the risk of second cancers are also addressed. As new information becomes available it will be used to update the guidelines. Aggressive treatment for malignant disease may produce unavoidable toxicities to normal cells. The mucosal lining of the gastrointestinal tract, including the oral mucosa, is a prime target for treatment-related toxicity by virtue of its rapid cell turnover rate. The oral cavity is highly susceptible to direct and indirect toxic effects of cancer chemotherapy and ionizing radiation. This risk is due to multiple factors including high cellular turnover rates for the lining mucosa, a diverse and complex micro flora, and trauma to oral tissues during normal oral function. Although changes in soft tissue structures within the oral cavity presumably reflect the changes that occur throughout the gastrointestinal tract, the following sections focus on oral complications of antineoplastic drugs and radiation therapies. Chemotherapy interferes with cancer cells, but it also affects some healthy cells. Many of the medications used in chemotherapy also carry the risk of both short-term and long-term problems. Short-term side effects include nausea, vomiting, hair loss, fatigue, anemia, abnormal bleeding, and increased risk of infection due to...
destruction of the bone marrow, as well as kidney damage and menstrual irregularities. Some drugs carry a risk of bladder inflammation and bleeding into the urine, hearing loss, and liver damage. Others may cause heart and skin problems. Longer-term effects can include infertility, growth problems, organ damage, or increased risk of other cancers. The medical staff may prescribe other medications to counteract as many of the side effects as possible.

Keywords: chemotherapy – pediatric

Surveying Viewpoints of Women with Breast Cancer, on Nursing Supportive Care & its Relation with their Quality of Life in Hematology-Oncology Research Center, Tabriz University of Medical Sciences, Iran, 2009

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Introduction: During past 4 decades, increased incidence of breast cancer made it most prevalent malignancy among Iranian women. The diagnosis of breast cancer is very stressful event having extensive impact on different aspects of daily life. Hence, being affected by breast cancer is very important among women, as the disease influences various dimensions of their quality of life. One of the essential roles of nurses, as an important care element, is to provide support for women with breast cancer. Due to soaring incidence of breast cancer and the importance of supportive care and quality of life assessments, the nursing supportive care and its relation with the quality of life, was studied in this research.

Methods of study: The present research was intended to evaluate the correlation among 100 women with breast cancer. Sampling was based on objective, and data was gathered by a questionnaire consisting of 3 parts: socio-demographic and clinical characteristics, quality of life and nursing supportive care.

The tool for the evaluation of quality of life was the combination of SF36, Swedish Health Related Quality of Life, and cancer patient’s quality of life instrument, assessing physical, mental and social aspects.

The supportive care questionnaire was a self prepared tool for the assessment of informational, emotional and physical support. The gathered data was analyzed with SPSS statistical software (version 14), and statistical tests: \( \chi^2 \) test, Fisher exact test, independent T test, scatter plot diagram and descriptive statistics were conducted.

Results: Findings showed that informational support in 58.6% scored average. Whereas emotional support in (56.6%) was desirable.

Findings: Findings showed that majority (63.5%) of the patients were subject to average supportive care. Viewpoints of patients on physical support in 51.2% and Overall quality of life was undesirable in 52.5% of the women. In physical dimension, majority (52.5%) and in mental dimension (64.6%) scored undesirable. But in social dimension, majority (52%) had desirable quality of life.

Nursing supportive care had a direct and significant correlation with quality of life (R= 0.2, P< 0.05).

Conclusion: Cancer and its treatment influence all physical, mental, social and spiritual dimensions of person. The end results got from this study can help nurses in their supportive care. By means of improved supportive care, nurses can promote the quality of life of breast cancer patients.

Keywords: Breast Cancer, Supportive Care, Quality of Life, viewpoints of women

Health Beliefs and Breast Cancer Early Detection Behaviors among Female Healthcare Providers in Tabriz Health Centers in 2009

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Background: Breast cancer is the second common cancer in the world and the most frequent cancer among females that will cause death if it dose not be recognized and cured. In Iran 10/7% of cancers are related to breast cancer. One out of eight Iranian women in 40-55 years old is likely to develop breast cancer. Early
detection of breast cancer by screening programs is a useful approach in controlling the disease. The purpose of this study was to assess the health beliefs and breast cancer early detection behaviors among female healthcare providers in Tabriz health centers.

Methods: In this descriptive study, 196 female healthcare providers were selected from 52 health centers by proportional cluster random sampling and their health beliefs and early detection behaviors are assessed by using Champion’s Health Belief Model (CHBM) questionnaire. Data analyzed by SPSS software.

Findings: The mean age of participants was 37.01 (S.D=7.54), and 73.5% of them were married and 45.6% were midwife. 73.2% of participants have performed BSE but only 26.9% of them performed it regularly (monthly), 26.6% of them had a mammogram and 10.7% of them performed clinical breast exam. There was a significant relations between job and BSE performing (p<0.001), marital status and BSE (p=0.002), age and mammography performing (p<0.001), age and CBE (p=0.02), job and health beliefs related to BSE barriers (p=0.01), job and health beliefs related to BSE self efficacy (p<0.001). 56.1% of participants had information about the process of BSE performing, 58.7% of healthcare providers were agreed that doing the mammography can induced to early detection of lamps. Common reason for not performing CBE was fear of probably detection of malignant lamp.

Discussion: In spite of good knowledge of health workers about the importance of breast cancer early detection behaviors in compare with other people; the result of this study showed that the rate of performance of BSE, mammogram and CBE is low in Tabriz healthcare providers. So providing educational programs with focus on screening programs is recommended. Also performing mammography in women older than 40 as a routine screening procedure is emphasized.

Keywords: Breast Cancer, Early Detection Behaviors, Health Beliefs, Health Care Providers, Breast Self-Examination, Mammography, Clinical Breast Exam

Bone Problems in Childhood Cancer Patients

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Children and adolescents may experience bone problems and endocrine problems during and after therapy for oncologic problems. The bone problems, which may be acute or chronic, and symptomatic or asymptomatic. Childhood cancer can affect bone metabolism and growth through a variety of mechanisms. The relative contributions of these factors to bone disease in a particular patient, and the contribution of genetics, is often unclear.

Cancer itself can affect bone metabolism by interfering with nutrition, physical activity, and/or pubertal progression during critical periods of growth and bone accumulation. Cancer treatment can alter bone metabolism through several mechanisms:

- Local effects on bone (antimetabolites such as methotrexate-glucocorticoids, and/or regional radiation)
- Central nervous system effects from chemotherapy and/or cranial radiation, causing pituitary hormone dysfunction (eg, growth hormone deficiency or hypogonadism)
- Peripheral effects of chemotherapy or radiation on endocrine organs associated with bone metabolism (gonads, thyroid, or kidneys)
- Children affected by cancer are at risk for several important skeletal problems during and after treatment, including osteonecrosis of the joints, reduced bone mineral density (BMD) and osteoporosis, and transient or permanent effects on linear growth.
- In some cases, reductions in bone mineralization and linear growth are caused by disruption of growth hormone, gonadal hormones, or thyroid hormones.

All childhood cancer patients should be counseled to maintain recommended intakes of calcium and vitamin D (400 to 800 units daily), even during cancer therapy. Patients should be encouraged to adopt habits supporting bone health (weight-bearing exercise, avoid smoking).

All childhood cancer patients should be carefully monitored for growth rates and pubertal progression during and after cancer treatment. Patients with growth failure or deceleration, or those with delayed or interrupted progression of puberty, or accelerated puberty should be evaluated accordingly.
Cancer Prevention Information

Abbassi A., Azarniyakan V., Azarbin Z.

Definition: Smoking and drinking alcohol can cause some people to get certain types of cancer. These cancers might be prevented by avoiding tobacco and alcohol. The best idea is to never use tobacco at all. Cigarettes, cigars, pipes and even smokeless tobacco cause cancer. People who already smoke should try to quit. According to the National Cancer Institute, as much as 80 percent of all cancers are due to identified factors, and thus are potentially preventable. (It is estimated that only 5 to 10 percent of all cancer cases are inherited.) Thirty percent are due to tobacco use, and as much as 35 to 50 percent are due to foods. There are things one can do to control these and other risk factors. Some recommendations include:

• Eat a variety of healthful foods, with an emphasis on plant sources.
• Eat foods as close to their natural state as possible.
• If a food will not rot or sprout, then throw it out.
• Shop the perimeter (outside aisles) of the grocery store. Avoid heavily processed foods.
• Eat five or more servings of a variety of vegetables and fruits each day.
• Choose whole grains in preference to processed (refined) grains and sugars.
• Limit consumption of red meats, especially those high in fat and processed.
• Choose foods that help maintain a healthful weight.
• Adopt a physically active lifestyle.
• Balance caloric intake with physical activity.
• Lose weight if currently overweight or obese.
• If drink alcoholic beverages, limit consumption.
• Reduce or cut out tobacco use.
• Increase intake of cancer-fighting foods.
• Avoid sugar. Cancer loves sugar. Some even feel cancer thrives on most carbohydrates too, so it would make sense to limit some of these too such as corn and potatoes.

Keywords: Cancer, Prevention

Chemotherapy-induced Alopecia

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Hair loss is a transient but often psychologically devastating consequence of cancer chemotherapy. A wide range of chemotherapy agents can affect the growing cells of the hair follicle. The frequency and severity of alopecia varies depending upon the specific chemotherapy agent or combination regimen administered, the dosage of drugs, and the treatment schedule. The majority of chemotherapy-induced alopecia is reversible once therapy is discontinued, with the possible exception of the epidermal growth factor receptor (EGFR) inhibitors. All patients who will receive chemotherapy that may result in alopecia should be informed of the likely side effect of hair loss. Options such as head wraps, hats, or wigs should be discussed in advance so that the patient can be more physically and emotionally prepared.

Although scalp protection through cooling or tourniquet has been reported to minimize delivery of chemotherapeutic agents to the scalp thereby potentially decreasing the risk of hair loss, case reports of cutaneous metastases or spread in these settings prevent general recommendation for their use. Because chemotherapy-associated hair loss is transient and completely reversible after cessation of therapy, adequate
counseling and psychological support before and during therapy should take precedence over the use of such devices.

Currently there are no available pharmacologic interventions that have been shown to decrease the risk of chemotherapy-induced alopecia. Although minoxidil has not shown efficacy in preventing chemotherapy-induced alopecia, the use of minoxidil during the period of regrowth may help to minimize hair follicle miniaturization in patients at risk for androgenetic alopecia.

Keywords : Chemotherapy, Alopecia

Daily Routine Nursing Care in Leukemia Patients

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Introduction: Patients with acute leukemia often experience symptoms of the disease itself and side effects of the treatment. Nurses play a major role in the interdisciplinary team that cares for these patients. Often it is the bedside nurse who recognizes the subtle changes that can lead to major complications. Fever, bruising, bleeding, infection, change in mental status, nausea, vomiting, and diarrhea are but a few of the problems patients with acute leukemia may develop. Differentiating disease-induced versus treatment-induced symptoms can be critical and requires a broad knowledge base, with an understanding of disease process, pharmacology, and symptom management. The complex nursing care of this population not only encompasses physical changes, but psychological as well and includes the patient and the patient’s identified support system.

Main nursing problems:
- Thrombocytopenia
- Neutrogena
- Anemia
- Mucositis/gastritis
- Nausea/vomiting
- Diarrhea/constipation
- CNS alteration
- Knowledge deficit
- Ineffective coping

Conclusion: It is projected that the incidence of acute leukemia will increase over the next few decades as the population of the United States ages. Age has been identified as a significant prognostic variable, and with more than 50% of acute myelogenous leukemia occurring in patients over the age of 60, clearly more research is needed. Great strides have been made in identifying genetic abnormalities associated with leukemia, and in developing novel therapies, with improvement in outcome data. Still, more research is needed. Ongoing and future clinical trials will study more novel therapies and new combinations of agents, as well as ways of minimizing graft versus host disease without compromising graft versus leukemia effect. Nurses must keep current of these trials and new agents to provide the essential patient care that is required.

Immunosuppressive Therapy and Malignancy in Organ Transplant Recipients: A Review Article

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Post-transplant malignancy is recognised as being a major limitation to the success of solid organ transplantation and it is currently considered one of the unavoidable costs of long-term immunosuppressive therapy.
However, the continual introduction of new immunosuppressive drugs and the growing knowledge about their different oncogenic profiles, requires a continuous evaluation of the available evidence on this topic.

The incidence and risk of malignancy is elevated in solid organ transplant recipients compared with the general population. As proof of the relationship between immunosuppressive therapy and post-transplant malignancy, epidemiological data reveal that the length of exposure to immunosuppressive therapy and the intensity of therapy are clearly related to the post-transplant risk of malignancy, and that once cancer has developed, more intense immunosuppression can translate into more aggressive tumour progression in terms of accelerated growth and metastasis and lower patient survival. The association between malignancy and immunosuppressive therapy is mediated through several pathogenic factors. Indirectly, immunosuppressive drugs greatly increase the post-transplant risk of malignancy by impairing cancer surveillance and facilitating the action of oncogenic viruses.

However, the direct pro- and anti-oncogenic actions of immunosuppressants also play an important role. The cancer-promoting effect of calcineurin inhibitors, independently of depressed immunosurveillance, has been demonstrated in recent years, and currently only mammalian target of rapamycin (mTOR) inhibitors have shown simultaneous immunosuppressive and antitumour properties. Reports of the initial results of the reduced incidence of cancer in organ transplant recipients receiving mTOR inhibitor therapy strongly indicate separate pathways for pharmacological immunosuppression and oncogenesis. The role of mTOR inhibitors has been firmly established for the treatment of post-transplant Kaposi's sarcoma and its role in the management of patients with other post-transplant malignancies should be clarified as soon as possible.

Prevention of morbidity and mortality resulting from post-transplant malignancy should become a main endpoint in solid organ transplant programmes, and the choice and management of immunosuppressive therapy in each phase of transplantation plays a central role in this objective. Although comprehensive and rigorous information about the management of immunosuppressive therapy in transplant recipients at risk of or affected by cancer is still lacking, new experimental and clinical data about mTOR inhibitors offers novel approaches to this problem.

Keywords : Immunosuppressive Therapy, Malignancy, Organ Transplant

Intensive Care for Oncology Patients

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Introduction: Intensive care unit admission may be required by patients with organ failure due to a newly diagnosed cancer or by cancer patients suffering a complication of chemotherapy or bone marrow transplantation.

General Oncology: Patients with organ failure due to newly diagnosed cancer may require intensive care unit admission for immediate chemotherapy and supportive care. In this patient population, mortality is determined by the nature and number of organ failures, not the nature or stage of malignancy.

The overall mortality for patients who require intensive care as a consequence of inpatient chemotherapy is approximately 50 percent. Respiratory failure is the most common complication leading to ICU admission and is also the leading no relapse cause of mortality following chemotherapy or bone marrow transplantation. Other common reasons for transfer of oncology patients to the ICU include sepsis, pulmonary edema, electrolyte disturbances, and alterations in mental status, acute airway obstruction, adverse reactions to medication, and the need for postoperative observation.

Bone Marrow Transplantation: As many as 40 percent of bone marrow transplant recipients develops one or more complications that require transfer to an ICU. Respiratory failure is the most common reason for transfer; other reasons include pneumonia, sepsis, mucositis, and intracranial hemorrhage, acute graft - versus - host disease, and cardiac dysfunction, veno-occlusive disease of the liver and adverse reactions to drugs.

Conclusion: In accordance with patient preferences, transfer to an ICU is often appropriate for cancer chemotherapy or BMT recipients who develop a potentially life-threatening complication. Patients who require
mechanical ventilation longer than 24 hours are likely to die in the hospital. Prognosis should be reassessed at frequent intervals with particular attention to the development of multiple organ dysfunctions.

Investigation of Awareness and Culture of Cancer Exposure in Zanjan Patients Suffering from Breast Cancer in 2099

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Introduction: Awareness of cancer before illness and active participate in various treatment processes have a significant impact on early diagnosis and relief at the disease.

Methods: This research is a descriptive study. Statistical community includes all cancerous patients (n=794) and research sample involves patients suffering from breast cancer who are under therapy (n=103). 65 persons were selected accidentally by Cochrane linkage and took part in the study. Data gathering was performed by means at questionnaire and data were analyzed by statistical software, Spp:16.

Result: 100% of the patients were female with the mean age of 48.3 years and mean illness duration at 17.5 months. 78% were urban and 22% were rural. 88% were married and 12% single. 100% of patients became aware at their diseases by themselves and none of them took part had no knowledge about this disease. 33% of patients denied their illness after becoming aware of it and didn’t trust their physicians diagnosis. 45% delayed in starting the treatment more than one months. 11% at the patient weren’t interested in knowledge acquisition about their illness and preferred not to talk to anyone about it.

Conclusion: lack of educational screening and prophylactic programs according to breast cancer. denied and mistrusting the physicians are at the important obstacles of diagnosis and early treatment of the disease.

Keyword: Awareness, Culture, Breast Cancer

Method of Chemotherapy Drug Preparation

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Chemotherapy is defined as the use of chemicals to treat any disease, but the term has come to be applied most commonly to the use of drugs to treat cancer. Cancer is an abnormal growth or proliferation of cells that tends to invade locally or spread to distant parts of the body.

How chemotherapy is given
• oral (by mouth)
• injection (intramuscular or subcutaneous)
• intravenous (IV)
• intra-arterial (into the arteries)
• Intr alesional (directly into the tumor)
• Intr aperitoneal (into the peritoneal cavity)
• Intr athecal (into the spinal fluid)
• topically (applied to the skin)
• In large oncology centers, HD's are usually prepared in the pharmacy or centralized drug preparation area. However, in small hospitals, outpatient treatment areas, and physicians' offices they have been prepared by physicians or nurses without appropriate engineering controls and protective. In article we explain many of guidelines for preparation and how can protect ourselves of bad side effect in during chemotherapy preparation.
Patient Information: Bone Marrow Transplantation
(Stem Cell Transplantation)

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Bone marrow transplantation (BMT) is a treatment used in some types of cancer. Bone marrow is the soft, spongy area in the center of some of the larger bones of the body. The marrow produces all of the different cells that make up the blood, such as red blood cells, white blood cells, and platelets. All of these cells develop from a type of basic cell found in the bone marrow, called a stem cell. In bone marrow transplantation, the patient is given very high doses of chemotherapy or radiation therapy, which kills cancer cells and destroys all the normal cells developing in the bone marrow, including the critical stem cells. After the treatment, the patient must have a healthy supply of hematopoietic stem cells reintroduced, or transplanted.

There are two types of bone marrow transplantation, autologous and allogeneic. An autologous bone marrow transplant uses a patient's own bone marrow or blood. An allogeneic bone marrow transplant uses a donor's bone marrow or blood. The donor is usually a relative of the patient (eg, sister), although unrelated donors are sometimes used.

Most patients who have bone marrow transplantation must remain in the hospital for several days or weeks during their treatment and recovery. It is important to understand and follow the hospital's bone marrow transplantation treatment plan to minimize the risk of complications (eg, infection) and to know what to expect in advance.

The treatments required before and during bone marrow transplantation can have serious side effects. Patients should be aware of the most common side effects (eg, diarrhea, nausea, vomiting, mouth sores) as well as the types of treatments that are available to improve comfort.

Following bone marrow transplantation, most people stay in the hospital for several weeks. However, even after going home, frequent visits with a doctor or nurse are needed for 3 to 6 months.

Keywords: Bone marrow transplantation- cancer

Patient Preparation and Family and Education Needs in Cancer

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Introduction: Cancer is a group of diseases in which cells are aggressive and/or invasive and/or metastatic to other locations in the body. Chemotherapy is the treatment of cancer with drugs that can destroy cancer cells.

Method and material: many difficult questions when diagnosed with cancer are:
- What Do I Tell My family?
- Am I going To be able To continue working?
- How do I pay you treatment?
- What happens after my treatment is finished?

Results: review the treatment plan and protocol.
- review the goals of the chemotherapeutic.
- review the schedule and rationale for diagnostic.
- provide the patient and family members with information on when and how to contact the nurse or the physician.
- review of the psychotice and emotional problem.
- review care of the venous access.

Conclusion: learning that some one in the family has cancer is an emotional thing for
patient. They might feel Fear, anger, loss of control, depression, despair, anxiety, helplessness, loneliness, guilty, confused.
In fact they are likely to feel different things at different times. if you help your patient stay informed and connected they will have an easier time coping with the changes that cancer brings.
Let them know that strong feelings are normal and that with your love and support you can move forward together with hope.


Valimoghaddam S., Moghimi M., Feizi A., Eghdam Zamiry R.
Zanjan University of Medical Sciences

Introduction: huge cost and expenses of cancer remedy and exceeding rate of cancer affection on the other hand have been forced the authorities of the health and medical system of Iran to mitigate the remedy costs paid by the cancer affected patients. The final goal of this study is the investigation about the performance and role of Law Order No 520000-11 held on the reduction of huge costs paid by the cancer affected patients in Zanjan province.
Methods: In this descriptive study, the total costs spent for every patient in Zanjan province have been computed and analyzed from the beginning of the project (dated 1/7/1387 until 30/04/1388).
Results: 746 patients have been supported by the government with the cost of Rials 3944188431(490000 USD). 76% of cost attributed to drug costs, 23% as hospital charge, 1% costs of interpreter services. Colorectal, Lymphoma, Breast and gastric cancer needed more cost to care patients because the rate of morbidity of these diseases were high and the frequency of treatment these patient were more than other kind of cancer.
Conclusion: after all the governmental supports it seems mandatory to make a blueprint plan for the costs attribution, social and financial supports with the aide of NGOs( Non-governmental organization) and other authorities in charge of the remedy of cancer affected patients because of huge costs witch they have to pay.
Law Order No 520000-11, huge costs, cancer affected patient

The Role of Nurses in Education of Psychosocial Aspects in Cancer Patients

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Introduction: The diagnosis of cancer is an unfavorable event for patients and their families. Therefore, patients need the management of their disease strong supportive care and high knowledge of their situation. So, the nurses can play a significant role in protection and education of the patients.
Methods: The study has been done on 30 patients in BMT wards from August 2005 for one year. The diagnosis of patients were CML, AML, ALL and A.A. The ages of patients were between 16-53 years old. The conditioning regimen consists of Busulfan 4mg/kg for 4 days and Cyclophosphamide 60mg/kg/daily for 4 days. All patients have undergone allogeneic peripheral blood stem cell transplantation.
1- Assessment of economical, social and psychological. Status.
2- Educational programs.
3- Responding to their questions and listening to their problems.
4- Using the supportive sources.
5- Evaluation of their reaction to their disease and therapies.
6- Encouraging them to express their feeling.
7- Using the educational films and booklets.
8- Introduction the previous patients to them.
Results: All the patients and their families cooperated with the nurses and accept their therapeutic plans. The anxiety and stress of patients were reduced, and their families felt comfortable.
Conclusion: The nurses in BMT wards had a very important role in introducing the needs of patients to their families. They helped the family of the patients to understand about the disease and necessary therapies for that. So by suitable and on time education, the nurses could have a signification role in reducing the somatic and psychological complication of HSCT and also promoting the outcomes of patients.

**Cardiac Arrhythmias as a Complication of Cancer and Chemotherapy**

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Introduction: One of the complications of cancer and chemotherapy is cardiac arrhythmias. This arrhythmias can be serious for patient during and after of chemotherapy.

Goal: The purpose of this study is determination of cardiac arrhythmias as a complication of cancer and chemotherapy.

Method: Study and research on internet and review of literature

Introducing the problem: The clinical manifestations that have been described in chemotherapy include arrhythmias, silent myocardial ischemia, angina, congestive heart failure, myocardial infarction, cardiogenic shock, and sudden death. For example nephrotoxicity, experienced by up to 35% of patients receiving cisplatin, can lead to significant hypomagnesaemia and hypokalemia, which in turn can cause cardiac arrhythmias. Also arrhythmias in cancer patients are caused most commonly by coexisting abnormalities rather than by the cancer itself. Thus although arrhythmias-inducing metastases to the myocardium and pericardium certainly occur, more commonly arrhythmias will be caused by hypoxemia, electrolyte imbalance, cardiotoxic radiation and cancer therapeutics or comorbidities such as chronic obstructive pulmonary disease. For management of these arrhythmias Holter monitoring can be very helpful in detecting and evaluating suspected arrhythmias.

Conclusion: Patients with cardiac arrhythmias as a complication of cancer and chemotherapy should be educated about these arrhythmias. Monitoring for anticancer drug–related cardiotoxic should be planned and specially tailored for each therapeutic protocol according to which anticancer agents are prescribed.

Key words: Chemotherapy, Heart arrhythmias

**The Role of Education in Increasing the Awareness of Nursing Staff about Breast Self-examination Methods, Zanjan 2009**

Moghimi M., Valimoghaddam S., Fekrmandy F., Eghdam Zamiry R., Feizi A., Ghahremani Z.

Introduction: Awareness of nursing staff, as one of the important bases of health and treatment according to breast cancer disease, can have a significant role in increasing the knowledge of other peoples of the society.

Methods: Research was done as a descriptive, interventional study .45 individuals of the nursing staff of Zanjan Valiasr hospital took part in the study. The questionnaires of awareness of breast examination methods were filled in by them before and after three months of participating in a series of educational workshops .The methods of data analysis was statistical software, SPSS:16.

Result: All nurses were female, mean age was 36 years old and their working history was more than 7 years . Awareness about the stapes of early breast cancer diagnosis before and after education was 30% and 54 ‰.91% of the participations had no awareness with VS3P methods as a novel technique of breast examination and after the educational course this rate was diminished to less than 15%. The awareness of breast examination before education was 34% and became 100% after it.

Discussion: Unfortunately, nursing staff, although occupied in an educational-treatment milieu didn’t have sufficient information about breast examination .Educational workshops can have significant impact on raising this awareness.

Keyword: Breast Self-examination, Nurse, Breast Cancer
What is a central venous line?

Khalilvandi S., Tahsili F.

Introduction: Central line is a long fine catheter with an opening (sometimes multiple openings) at each end used to deliver fluids and drugs. The central line is inserted through the skin into a large vein that feeds into a larger vein sitting above the heart, so that the tip of the catheter sits close to the heart. There are several veins that are suitable for access, and the line may be inserted above or below the collarbone, on the side of your neck, in your groin or at the front of the elbow. The actual skin entry site depends on which vein is used. The line that is inserted at the elbow is called a PICC (Peripherally Inserted Central Catheter), and the lines that enter the shoulder or neck are called Central Venous Lines.

CV line Insertion: The injection of local anesthetic is usually the part of the procedure that causes the most discomfort. Once the needle or cannula is sitting in the vein the remainder of the procedure is not painful. Some minor bleeding may be seen at the insertion site on the first day chest X-Ray is taken to see where the tip of the line is sitting in the vein.

What are the risks of central lines? As with most procedures there is a small risk of complications such as:

- Infection
- Accidental puncture of lung
- Accidental puncture of artery
- Incorrect position

Conclusion: Providing advice and support for a blood cancer patient can be difficult, and while medical staffs are more than equipped to do so, the recovery process of a blood cancer is lengthy and a patient’s needs can change quite radically over the months and years. It is important therefore, to have a key contact – somebody who knows the patient and their blood cancer history.

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نتیجه گیری: بیماران مبتلا به عوارض قلبی و عروقی ناشی از سرطان درمانی و خانواده و مراقبین آنها باید در مورد علائم و نشانه های مسمومیت قلبی و عروقی آموزش داده شوند. همچنین بررسی درمانی باید در هنگام بروز این علائم و نشانه ها اطلاعات کافی داشته باشد.

کلید واژه: عوارض قلبی عروقی، شیمی درمانی

بررسی هورمونی در کودکان رها یافته از سرطان

محمّدعلی قارلوقی، مجیدی، پزشکان
دانشگاه علوم پزشکی تهران، بیمارستان شریعتی

یکی از سرطان نخستین مردانه می‌تواند به بیماران دختر متصل شود و نمایش این مشکل به دست ایفای سلامتی در درمان آن را جبران کند که بکنی از آن ها اختلالات هورمونی است. شروع اختلالات هورمونی می‌تواند در طی شیمی درمان و یا بعد از آن یابد. انکار افتاده است: Endocrinopathy

عبارت در بند "1. نارسایی و کنگری رشد
2. چاقی
3. پی اشتایی
4. خسکی مفاوم
5. پوست خشک و موهای شکنده
6. چربی
7. خستگی
8. تغییر زمانی شروع و یا عود بیماری در طی تغییرات در سلول‌های اختلالات غدد درون ریز داده‌اند. اندازه‌گیری فعلی از وزن و عایق و سبب آسیب در و یا پس از وضعيت بلع و Vit و Ca و FSH و هورمون‌های جنسی در صورت تأخیر در بلع لازم است. این پیشی جست و وضعیت مداوم کافی پیش بینی و نشانه‌های اختلالات در مواردی که بیمار در خط دختری قرار دارد و بررسی درمانی نیز روزانه مطمئن شده و مراقب خانواده بیشتری در مواردی که بیمار در خط دختری قرار دارد و بررسی درمانی نیز روزانه مطمئن شده و مراقب خانواده بیشتری در مواردی که بیمار در خط دختری قرار دارد و بررسی درمانی نیز

کلید واژه: کودکان، سرطان، اختلالات هورمونی

تغذیه و رابطه آن با شیمی درمانی

پریامحمدی پروانه
دانشگاه علوم پزشکی تهران، بیمارستان شریعتی

روزیم غذایی در درمان سرطان نقش مهمی دارد. خوردن مواد غذایی مناسب قبل هنگام و بعد از شیمی درمانی سبب سرعت بهبودی و بقاء توانایی بیمار می‌شود.

ارزیابی مشکلات تغذیه ای:
بررسی مشکلات پرستاران در ارتباط با ایمنی کار در بخش‌های شیمی درمانی

الحاجی فاطمه، حیدری مهری
دانشگاه تربیت مدرس

مقدمه: عدم رعایت قواعد تعیین شده از طرف اداره بهداشت و ایمنی شغلی در کار با داروهای شیمی درمانی باعث جذب بیماران به بیماری شدید و افزایش نرخ وقوع حوادث درمانی می‌گردد.

هدف: هدف این پژوهش تعیین مشکلات پرستاران در بخش‌های شیمی درمانی در ایمنی کار است. در این مقاله به بررسی نتایج پرسشنامه ای در این رابطه پرداخته شده است.

روش مطالعه: این پژوهش یک مطالعه توصیفی-تحلیلی است که در یک بیمارستان دولتی به انجام رسید. نمونه‌های پژوهش شامل تمام پرستاران بیماران در بخش‌های شیمی درمانی می‌باشد که تعداد آنها 30 نفر است. از گردآوری داده‌ها شامل پرسشنامه اطلاعات دموگرافیک (6 سوال)، پرسشنامه تعیین مشکلات پرستاران (8 سوال) به افراد مراجع گزارش‌های متداول باز و سوال‌پرسی بر روی پرسشنامه تعیین مشکلات پرستاران، زمینه‌بندی این مطالعه، اجرای پرسشنامه‌سازی، بررسی نتایج پرسشنامه‌های تعیین مشکلات پرستاران، ارزیابی رعایت قواعد تربیتی و زمینه‌بندی این مطالعه، اجرای پرسشنامه‌سازی، بررسی نتایج پرسشنامه‌های تعیین مشکلات پرستاران، ارزیابی رعایت قواعد تربیتی و

یافته‌های پژوهش شامل:

1- عدم رعایت قواعد و نهایت‌الزمان در این بخش‌ها
2- افزایش نرخ وقوع حوادث درمانی
3- عدم رعایت قواعد در این جلسات
4- افزایش نرخ وقوع حوادث درمانی

نتیجه‌گیری: با بررسی نتایج پرسشنامه‌های تعیین مشکلات پرستاران در این بخش‌ها، نتیجه گرفته شد که ضمن افزایش نرخ وقوع حوادث درمانی باعث ایمنی کار در این بخش‌ها و ایمنی کار در این بخش‌ها می‌شود.
پرستاران (6 سوال سرگشته ای و دو سوال بار)؛ پرسش‌نامه تعیین مشکلات ارتباطی پرستاران (4 سوال سرگشته ای و دو سوال بار)، پرسش‌نامه تعیین مشکلات تجربیات و امکانات پرستاران (7 سوال سرگشته ای و دو سوال بار)، پرسش‌نامه تعیین مشکلات ممحیطی پرستاران (2 سوال سرگشته ای و دو سوال بار).

یافته‌ها: میانگین سنی اولین پرستاران نمونه پژوهش 30-35 سال، 100 نفر، آنها زن و دارای مدرک کارشناسی، 63/3 آنها سابقه کار کمتر از 5 سال و 86/7 در آن‌ها آموزش خصوصی ارتباط با اینم کار دارای دوره شیمی درمانی نبودند. مشکل اصلی از نظر پرستاران نمونه پژوهش در حیفه آموزش نبوده و تا اینکه به دیدن نتایج، 100 نفر و نبود افراد مجرد جد آموزش (98/83) (شکل اصلی در حیفه مدرنیتی - اجتماعی و انگیزه نبودن تحقیقات لازم برای ان پرست اول مهارت اضافه و یا مرخصی بیشتر از سایرین (33/66٪) و احساس خطر پرست از کار در این بخش (95٪)، مشکل اصلی در حیفه ارتباطی پرستاران مشکلات ارتباطی با مدیران (90٪) (شکل اصلی در حیفه تجهیزات و امکانات نبودن سطح مصرفی (66/91٪) و نبود گان یکی گزار مصرف (83/33٪) و مشکل اصلی در حیفه مسیری نبودن بخش مخصوص شیمی درمانی (66/91٪) است که از طرف پرستاران نمونه پژوهش مطرح گردد.

راهنمای پیشنهادی برتر: شامل کمیتی اینم کار در دبیرستان‌های دارای بخش شیمی درمانی با اهداف علمی تولید سازی پرستاران در ابعاد ارتباط سطح نهایی، دانستنی برخی از ترکیب‌های متغیران سالنامه، دورة جهیزی در این دوره ناز یافتن فرصت‌های بهبود از این بخش. در مکان نبودن بخش ها امکانات لازم در رابطه با اینم کار دارای دوره شیمی درمانی و شرایط راهبردی مناسب در موقعیت انتخابی درمانی باشد.

کلید واژه: پرستاران، اینم کار، داروها، شیمی درمانی، تولید سازی خستگی و ارتباط آن با شیمی درمانی

کوچه رستکلیان ژره
دکتر مورتazon پرستاری و زردات بهداشت درمانی و آموزش پزشکی

خستگی یک نشانه همگانی است که در افراد سالم و بینای فعالیت فیزیکی، خسته، کم‌خوابی و یا رتم بیولوژیکی ظاهر می‌شود علاوه بر این خستگی از شایع ترین نشان‌های بیماری‌ها (جسمی و روانی) نیز می‌باشد که اغلب اولین علائم حضور بعضی موارد غیرطبیعی است. در افراد مبتلا به سرطان، خستگی یکی از شایع ترین و پرپیشته ترین مشکلات می‌باشد. تجربه خستگی پیمان می‌باشد به سرطان ممکن است از خود بیماری، نتایج شناسی روشن‌اندازی و کاهش ظرفیت کاری ناشی شود. خستگی مرتب با پیمان ارتقاء سطح خستگی در این پیمان را 100 – 65 درصد نشان داده است. این نشانه بعد از درد، دومن نشانه پرپیشته گر در پیمان نمی‌باشد به پیمان تحت شیمی درمانی ارتقاء است. خستگی در افراد سالم با خواب و استراحت تکمیل می‌باشد ولی در پیمان مبتلا به سرطان یکی از عوامل عوارض شدیدی در اینم کار است. به واسطه اینست که پیمان گر در پیمان نمی‌باشد به پیمان تحت شیمی درمانی، نیازمند به ادامه کمک‌پذیری این پیمان‌ها را تحت تأثیر قرار می‌دهد.

عوامل چندگانه‌ای با خستگی ناشی از شیمی درمانی همراه بوده که شامل عوامل روشن‌اندازی، محیطی، نگهداری، طول مدت بیماری، شرایط فعلی درمانی، تأثیر مارکور، نشانه‌های پیشگیری، وضعیت بالینی، و سایر عوامل نقش شیمی درمانی می‌باشد. در بعضی از تحقیقات بین خستگی و سایر نشانه‌های همراه بیماری مثل درد، تغییر نفیس، توعی، استفراغ و یا شتاب‌های گیم شیمی درمانی رابطه معنی‌داری وجود داشته است. با توجه به شیوع بالای خستگی در پیمان تحت شیمی درمانی و تأثیر آن بر کیفیت زندگی این پیمان‌ها کنترل آن به جهت مهم مراقبت در پیمان‌ها محسوب می‌شود. به‌طوری‌که استراحت مطلوب در این زمینه مستلزم شناخت این عارضه می‌باشد. این مقاله ضمن تعريف خستگی سرطان به موره مشخصات، اگر، دلایل ایجاد کننده و مداخلات درمانی و پرستاری خستگی ناشی از شیمی درمانی می‌پردازد.

کلید واژه: خستگی، شیمی درمانی
تکنیک درمانی و روش‌های تکمیلی در تکنیک درمانی

نصیر مقدم زهرا

دانشگاه علوم پزشکی تهران، بیمارستان شریعتی، مرکز تحقیقات هماهنگی‌کاری‌های اکثریتی و بیمارستان فیتیلی

تکنیک درمانی زمانی انجام می‌شود که هیچ شانسی جهت درمان وجود نداشته باشد. منظور از تکنیک درمانی کنترل علائم مانند: درد، کوتاهی نفس، خستگی مفرط، بیوز، نهایت به اشتهای و اشکال در خواب باعث می‌شود درمانهای پیش‌رفته و به‌طور کلی به‌طور زندگی برای زمان بقایای مانند قرار داده و حفظ نماید. می‌باشد به‌پایان در نظر داشته که این مراحل برای هر بیمار بسته به نوع بیماری، شدت آن، توانایی‌های بیمار و شرایط دیگر و متفاوت می‌باشد.

این مراحل عاملی بر مراحلهای عالمنامه شامل: مهارتهای روحی و اجتماعی جهت بهبود خواناده و باشند.

درمان‌های تکمیلی: تحقیقات اخیر نشان می‌دهد که بعضی از درمان‌های مکمل ممکن است درمانی ارزان و مؤثر برای بیماران سرطانی باشد. اینگونه سال قبل استفاده از آنها به‌صورت مورد فواید در جامعه پزشکی شده است. تخمین زده شده که حدود 80-60% بیماران سرطانی از یکی از انواع روش‌های مکمل در طی دوران بیماری‌شناسی با فاصله زمانی توانستند و این مسئله شاید باعث نگرانی بیماران درباره درمان‌های مکمل است همچنین در تعیین نشانه‌های سرطان هرمان با اختلالات روحی و کمک مولف بهبود بیماران استفاده می‌نمایند و این مسئله باعث کاهش درمان‌های سرطانی ممکن است باشد.

کاربرد درمان‌های تکمیلی: مطالعات نشان داده که درمان‌های مکمل اصولی می‌توانند در:

1-مشاغل و روابط بیماری
2-روش‌های ریلکسین
3-بیماری‌های دمایی
4-بیماری‌های کبدی
5-بیماری‌های ویروسی و نفیروسی
6-بیماری‌های مزمن و مزمن کروماتیک

به‌بایان‌شده باشد که:

1-درمان‌های تکمیلی درمان‌های انتخابی برای مداوا و سرطان نیستند. آنها فقط به‌عنوان درمان‌های رفتاری برای اصلی درمان‌های اصلی استفاده می‌شوند.

2-درمان‌های تکمیلی درمان‌های انتخابی برای مداوا و سرطان نیستند. آنها فقط به‌عنوان درمان‌های رفتاری برای اصلی درمان‌های اصلی استفاده می‌شوند.

3-درمان‌های تکمیلی برای مداوا و سرطان نیستند. آنها فقط به‌عنوان درمان‌های رفتاری برای اصلی درمان‌های اصلی استفاده می‌شوند.

4-درمان‌های تکمیلی برای مداوا و سرطان نیستند. آنها فقط به‌عنوان درمان‌های رفتاری برای اصلی درمان‌های اصلی استفاده می‌شوند.
مراقبت‌های پرستاری بیماران با‌کارسینوم پاتکراس

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یکی از سرطان‌کشته‌ها به علت ناشناخته است که بعد از تومورهای ریه، کولون و پستان چهارمین بدخیمی شاپ به شمار می‌رود. بیش از 90% تومورهای اندوکارسینوم سلول‌های جریانی هستند. سایر تومورها از تومورهای سلول‌های جریانی، سلول‌های اپیدرمی و اندوکارسینوم سلول‌های آسپین. عوامل خطر سرطان عبارتند از: با اعمال دخانیات، دیابت شیرین، ریز، انواع پاتکراتی و رژیم غذایی حاوی جربی جویانی و گوش فراوان شایع‌ترین عوامل بیماری عبارتند از دردگرد و یا نشان‌های عارضه‌های علائم درمانی و یا افزایش وزن. این جا که بایستی نمود تومور باید در زمان شاخص باشد. می‌توان در این زمینه موارد زیادی از بی‌اشتباه، نمونه‌بندی و استنادگری را به درمثابه آن‌ها بود.

مراقبت‌های پرستاری: پرستار اولیه فرد از این بهداشتی است که با یکی پرستار سرطانی مواجه می‌شود. گاهی اولین برخورد با پرستار در مرحله پذیرش آنها در بیمارستان است که می‌تواند برای جهت قسمتی تخصصی، بهبود و یا برنامه‌ریزی جهت یک جراحی باشد. حتی اگر امرت رساهای خارجی، ریز، و یا برنامه ریزی جهت یک جراحی باشد، کمیم با سطح ضرری در این بیماران با استناد به نواحی مرکزی، پزشکی و زائری، افراد مالکی در زمینه‌های دیگر فردی، می‌تواند در صورت علائم نشان‌دهنده پرستاری، بهتر باشد. یکی از سایر عوامل اصلی برای انتخاب پرستاری، انتخاب و کنترل روش درمانی و مواد می‌باشد. بیماران در زمینه‌های مختلف از عادات زندگی، افراد و بیماران، پزشکان، بهداشتی، ارتباط با پزشکان و افراد در زمینه‌های مختلف از عادات زندگی، با پرستاران پزشکان، درمان‌های زندگی و با پزشکان پزشکان، درمان‌های زندگی و با پرستاران

واژه‌های کلیدی: پاتکراس، مراقبت‌های پرستاری، سرطان

بررسی کیفیت زندگی بیماران مبتلا به سرطان نازه تشعیش داده شده

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مقدمه: از جمله اختلالاتی که به شدت در زندگی بیماران مبتلا به سرطان نازه تشعیش داده شده، انتظار محتمل می‌باشد. هدف: مطالعه حکایاتی با هدف بررسی کیفیت زندگی بیماران مبتلا به سرطان نازه تشعیش داده شده، انتظار محتمل می‌باشد. روش: بررسی مطالعه حکایاتی توصیفی حکایتی است که در گام‌هایی مورد بررسی قرار نگرفته است. نمونه‌ها 196 بیمار مبتلا به سرطان نازه تشعیش داده شده، با در مورد مشخصات فردی،
بررسی کیفیت زندگی و عوامل موثر بر آن در بیماران تحت شیمی درمانی مبتلا به سرطان رحم و ضمام آن

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مقدمه و اهداف: در حالت حاضر برسی کیفیت زندگی به عنوان یک موضوع مهم در مطالعه بیماری‌های مردمی، به خصوص سرطان مطرح می‌باشد. سرطان در تمام موارد بر کیفیت زندگی بیماران به درجه مختلف تأثیر می‌گذارد و در حال حاضر ابیات به سرطان‌ها یکی از مسائل مهم در ایران و دنیا می‌باشد. در این بین یکی از علل برجام‌رساندن سرطان‌ها به سرطان رحم و ضمام آن بوده، این نوع سرطان به دلیل تأثیر بر جنبه‌های مختلف زندگی زنان و عوامل آن بر آن به دلیل تاثیرات شگرف‌بر زنایت فرد و اهمیت بیشتری بر خوردار است. از این رو انجام آزمون‌های جدید شناسایی عوامل موثر بر کیفیت زندگی این مبتلایان ضروری به نظر می‌رسد.

روش کار: مطالعه حاضر یک مطالعه توصیفی تحلیلی مقیاسی بوده که به مظور برسی عوامل موثر بر کیفیت زندگی مبتلایان به سرطان رحم و ضمام آن بر روی 78 بیمار مبتلا در بخش شیمی درمانی بیمارستان دانشگاه علوم پزشکی مشهد در سال 1386 انجام شده است. جمع آوری اطلاعات مربوط به کیفیت زندگی با استفاده از پرسشنامه 36 SF در طی چهار ماه انجام شد.

نتایج: میانگین و انحراف میانگین کیفیت زندگی در افراد تحت مطالعه 12/34±6/46/95 تعیین شد. وضعیت تاهل و وضعیت شغلی، مقام زمان بیماری و درجه تمرس یافته تومور، تعداد میانگین کیفیت زندگی و علایم بیماری نظر خستگی، تهوع و استفراغ، درد، تگی نفس، کاهش خواب از جمله متغیرهایی بودند که در تحلیل یک متغیر ارتباط معنی‌داری با کیفیت زندگی نشان دادند (P<0.05 این در حالی است که با استفاده از تحلیل چند متغیری نتیجه ارتباط معنی‌داری بین درجه تمرس یافته تومور، وضعیت شغلی و علایم بیشتر با کیفیت زندگی مشاهده شد (P<0.05).

نتیجه‌گیری: با توجه به نتایج حاصله از این پژوهش به نظر می‌رسد انجام اقدامات حمایتی و غربالگری از سوی مراکز و خدماتی بهداشتی می‌تواند در پیشگیری و ارتباط سطحی کیفیت زندگی این افراد موثر باشد.

کلید واژه: کیفیت زندگی، سرطان رحم و ضمام آن، پرسشنامه 36 – SF.
مراقبت از بیماران

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End stage

مراقبت از بیماران

واژه‌های کلیدی: مراقبت‌های پرستاری، بیماران

مراقبت‌های پرستاری و عوارض شیمی درمانی در لومسی

بصاعور شیوا سادات
دانشکده پرستاری و مدیریت دانشگاه علوم پزشکی تهران

از آنجا که بیماران از مردم با دارد و مرگ‌هاش از مردمان از این تاریخ اندازه گرفته و پرستاران نیاز دارند که دانش خورده و توانایی داده و برای مقاله با چالش‌های مراقبت‌های از آن‌ها، دست به تدوین اهداف واقع بینانه بزنند.

پا یها و یاس مسئله‌های مراقبت از بیماران مصرف به مرگ به محور آموزش (جامعه، پرستاران، پزشکان)، سیاست‌های دولت و دسترسی به داروهایی از قبل

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1. اخراج در شرایط محروم دهان
2. اخراج در سلامت بالقوه
3. آلوپسی
4. ضایعات بدنی بیش
نیازهای آموزشی بیماران مبتلا به سرطان

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بیمارستان فیاض به پاسیون تهران

مقدمه: آموزش به بیمار مبتلا به سرطان یکی از اصول اساسی در قرارداد این بیماران می‌باشد و با کمک تحصیل و تربیت پرستاران رفع نیازهای آموزشی بیماران مبتلا به سرطان می‌باشد.

به‌منظور بررسی مطالعات مقاله‌های حاضر، یک مطالعه موردی است که بعد از جستجو در پایگاه‌های اطلاعاتی در SID, Science Direct, pubmed تحصیل انتخاب و نتایج آن مورد بررسی قرار گرفت.

نتایج: بررسی استنباطات نشان داد که اولویت آموزشی بیماران شامل آموزش در مورد تشخیص بیماران، عوارض، نگهداری، مراقبت از شانه‌پیچگیری از افسردگی و تغییرات طاهره و تغییرات کاری می‌باشد. جهت آموزش به بیمار لازم به برگزاری ریزی و استفاده از روش‌های متفاوت است و نیاز به پرستاران آموزش دیده و ماهر می‌باشد. پرستاران باید نیازهای آموزشی بیماران را شناسایی نموده و با استفاده از روشهای آموزشی در دهانه بیماران نقش مهمی داشته باشند.

نتیجه گیری: نتایج بدست آمده از این بررسی ها نشان داد که عدم آموزش کافی می‌تواند باعث به خطر افتادن حیات بیماران شده و فراوانی درمان را دچار چالش کند.

کلید واژه: نیازهای آموزشی، سرطان
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*International Journal of Hematology- Oncology & Stem Cell Research* publishes material in the form of editorials, short reports, letters, reviews, special articles, and commentaries.

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