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Introduction Nephroblastoma is a kidney cancer which usually appears in children and rarely in adults.

Aim The aim of the paper was the presentation of Tu Wilms cases in the Department of Hemato-Oncology at December 2008 till March 2012.

Materials and Methods In the paper are included 17 cases, 7 males (41.17%) and 10 females (58.82%), that are present in our department. They are of different sexes and ages. Meanwhile, regarding to tumor lateralization, 11 cases have been on the right kidney or (64.70%), 5 cases or (29.41%) were located in the left kidney, and 1 case or (5.88%) was on both kidneys. The examination is done based on history, physical examination, laboratory analysis, radiologic (X-ray, ECHO of abdomen and CT of torax and abdomen) and biopsy.

Results The preoperative chemotherapy is applied into 12 cases (70.50%) and in 16 cases (94.11%) is applied the treatment of pre and postoperative. According to SIOP 2001 protocol, one of them was accompanied abroad after the treatment. During the preoperative treatment the tumors mass is reduced from 25%–35%. Two of these cases are in treatment for relaps, one of them refused the operation after the preoperative treatment.

Conclusion Based on the data of this research, we conclude that the by diagnosing in the beginning of the stage, preoperative, a good surgical intervention and the postoperative treatment, has provided very good results and increases the longevity of these patients.

753 THE ASSOCIATION OF ZINC DEFICIENCY WITH IRON DEFICIENCY

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Aim The aim of this study is to determine whether iron deficiency is associated with zinc deficiency.

Methods Ninety-eight patients with ID and/or IDA and 100 healthy controls who were examined at Cerrahpasa Medical Faculty, Pediatric and Child Health Department outpatient clinic were included prospectively in this study. Blood samples were collected from cases and controls for complete blood count, iron, TIBC, ferritin and zinc levels. The association between zinc levels and hematological and biochemical parameters were examined.

Results There was significant difference ($p < 0.05$) between zinc levels of the cases and controls, serum zinc levels were lower in cases compared to controls. Zinc deficiency was more frequent in children with iron deficiency and/or anemia (9.2%) than those without iron deficiency (1%). In cases, no significant difference was found ($p > 0.05$) between zinc levels in relation to the absence or presence of anemia. There was no correlation between zinc levels and Hb, Htc, MCV, ferritin or TIBC ($p > 0.05$). However there was a positive correlation between zinc levels and iron and TSI. In the control group, there was no statistical relation between zinc levels and Hb, Htc, MCV, iron, TIBC, TSI and ferritin levels ($p > 0.05$).

Conclusion In our study, we detected significant lower zinc levels in children with iron deficiency before the onset of anemia. Therefore, we propose that the use of preparations containing both iron and zinc might be more effective in improvement of clinical signs of iron and zinc deficiency.

754 IMMUNOLOGIC EVALUATION IN PATIENTS WITH β -THALASSEMIA MAJOR

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Background Several studies demonstrated some alterations in immune system of β -thalassemia major patients. The aim of this study was to assess the immunologic markers of these patients in comparison with control group.

Method Immunologic markers including CD8, CD4 [T-lymphocyte], CD19 [B-lymphocyte], and CD56 [NK cell] were assessed in thirty patients with β -thalassemia major (18 male and 12 female; under 18 years) and similar age and sex matched healthy controls. All patients had no infectious, malignant or chronic diseases. Complete blood count, and serum ferritin and iron also were measured. Statistical analysis performed by SPSS (v.15) software.

Results We did not found any abnormality in cellular and humoral system. However, mean CD56 level in thalassemia group were significantly lower than control group ($6.54 \pm 2.87\%$ vs. $9.13 \pm 4.01\%$; $p = 0.006$). Mean CD4 in thalassemia patients with splenectomy was significantly lower than patients without splenectomy ($31.8 \pm 6.55\%$ vs. $40.3 \pm 9.2\%$; $p = 0.02$).

Conclusion NK cell marker in the patients with β -thalassemia major is lower than healthy individuals, that may be responsible for defects in innate immune system.

755 DOES PARTIAL EXCHANGE TRANSFUSION PREVENT NEURODEVELOPMENTAL DISABILITY IN INFANTS WITH POLYCYTHEMIA?

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Partial exchange transfusion (PET) is traditionally suggested as treatment for neonates diagnosed with polycythemia. Nevertheless, late neurodevelopmental outcome of this treatment is controversial. We aimed to compare the neurodevelopmental outcomes of the children who had history of neonatal polycythemia that treated with PET or not at 2 years old. Neonates who were hospitalized due to polycythemia between April 2009 and September 2009 included the study. Mental and psychomotor evaluations were performed using the Bayley Scales of Infant and Toddler Development Second Edition (BSID-II). The examiner was blinded to both group. 13 infants treated with PET and 21 not treated with PET were included the study. There were no statistically difference in respect to demographic and prenatal characteristics between groups. There were no statistically significant differences in immediate complication rates between groups, except indirect hyperbilirubinemia. Mental and psychomotor scores of the both groups were not statistically different. When the infants grouped into according to psychomotor scores (> 85 and ≤ 85) more infants who were not treated with PET had psychomotor scores ≤ 85 compared to the other group ($p = 0.03$). More infants who were not treated with PET had psychomotor scores between 70 and 84. This means group who not treated with PET had more infants having mild psychomotor disability compared to other group. The main issue about the polycythemia treatment is late neurodevelopmental outcome. In our study, treatment with PET may protect the neonates with polycythemia from the late psychomotor disability.

756 THE EFFECTIVENESS OF RDW-CV IN DIFFERENTIATING MICROCYTIC ANEMIA

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Background: Iron deficiency anemia (IDA) and thalassemia are the most common microcytic anemia in children. Sometimes, expensive or invasive investigations are necessary for their distinction. Red cell distribution - coefficient variation (RDW-CV) is a new generation marker more often used in differentiating IDA from thalassemia. A number of hematological indices are also useful (Mentzer, Shine&Lal, Green&King, Ricerca).

Aim To demonstrate the effectiveness RDW - CV in differentiating microcytic anemia.

Method Retrospective study conducted on a total of 215 patients with microcytic anemia. Criteria for study group selection: MCV and Hb below the minimum age reference (mild anemia, Hb between 9–11 g/dl and moderate anemia from 8.5–9 g/dl), without a history of other hematologic disorders or chronic diseases.

Sideremia was determined to all patients to confirm the diagnosis of IDA (the least expensive investigation for distinction). The RDW - CV > 16% was considered pathological.

Results 98 patients had low levels of sideremia, 134 patients had mild anemia and 81 - moderate anemia. RDW-CV was significantly correlated with sideremia, strongly for the group with mild anemia ($p < 0.05$). Statistical significance was observed for Shine&Lal ($p < 0.006$), Green & King ($p < 0.005$), Ricerca ($p < 0.05$). The greatest sensitivity presented Green&King (72%), followed by Shine&Lal and Ricerca, and the highest specificity Shine&Lal and Ricerca (92%).

Conclusions RDW-CV is useful in differentiating IDA, especially in mild forms. Although Green&King index is the most sensitive, we support Ricerca index for simple calculation formula.

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PREVALENCE OF MATERNAL ANEMIA AND ITS ASSOCIATION WITH HEMOGLOBIN LEVELS OF NEWBORN BABIES

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Background and Aims There are some reports regarding to the association between maternal and fetal hemoglobin level. The present study aimed to determine the prevalence of maternal anemia and its association with hemoglobin levels in their newborn babies.

Methods It was a descriptive analytical study in which mothers who referred for delivery to the Besat Hospital in Sanandaj city, Kurdistan province, western Iran were investigated. Overall, 604 mothers was recruited using easy sampling method. Blood assessment was conducted using the cell counter machine. The statistical tests of Chi square and t were used. Meanwhile, the Spearman correlation coefficient was used to test all correlations. The multiple regression analysis was also undertaken to assess the relationship between maternal and fetal hemoglobin versus confounding factors.

Results The prevalence of maternal anemia (Hb<11 g/dLit) before delivery was 24.8% (n=150) and Hb levels less than 10 g/dLit was 6.6%. Overall, 5.8% (n= 34) newborns had a mean Hb levels of less than 13.7 g/dLit. A small number of mothers (3.3%, n=20) had preterm delivery and 31 newborn babies (5.3%) were low birth weight. There was no significant relationship between fetal Hb and gender, twins, and preterm babies. There was also a positive and significant correlation between maternal and fetal Hb levels ($r=0.143$, $p < 0.001$).

Conclusion A significant association was observed between fetal as well maternal anemia with mothers' age, preterm birth, duration of iron therapy and occupation.

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DISTAL ULNAR CHANGES IN THALASSEMIC CHILDREN WITH DEFERIPRONE RELATED ARTHROPATHY

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Abstract 758 Figure 1



Abstract 758 Figure 2

Background Regular blood transfusion and iron chelation are the standard of care for thalassemic children. Deferiprone is an effective oral iron chelator but causes significant arthropathy. Though clinical and radiographic features deferiprone related arthropathy have been described, the long-term effects are not known.

Aims To report clinical and radiographic findings in thalassemic children with deferiprone related arthropathy.

Methods Evaluation of routine radiographs of left wrist and hand done for bone age estimation in 40 thalassemic children revealed unique radiographic changes in 13 children with previous or current deferiprone related arthropathy. Subsequently, these children underwent radiographs of both the knee joints.

Results Thirteen patients (10 males: 3 females) aged 10–16 years had abnormal radiographic findings. Median duration of deferiprone