

Besides similar results, significant differences were also found among the PK parameters. Previous studies didn't compare CLs between myPKFIT and WAPPS, this is the first in our study. While no difference was found between t1/2's, the difference between recommended doses may be due to CL difference.

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#### PLATELET DISORDERS / THROMBOSIS AND ANTITHROMBOTIC THERAPY

OP 16

##### IMMUNE THROMBOCYTOPENIA PURPURA FLARE POST SARS-COV-2 VACCINATION

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**Case report:** The main strategy to control the SARS-CoV-2 pandemic is through global vaccination. One of the rare side effects of vaccination is Immune Thrombocytopenic Purpura (ITP). We present a 31 years old lady with a history of ITP, came on her 8th week of pregnancy with fever and dry cough after receiving the first dose of Pfizer vaccine. The ITP flare worsened after the second dose of the vaccine. Patients with ITP should have their second dose of vaccine delayed if they had flare particularly if pregnant.

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OP 17

##### THE OUTCOME OF IMMUNE THROMBOCYTOPENIC PURPURA IN CHILDHOOD AND THE RISK FACTORS FOR CHRONICITY

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**Objective:** Immune thrombocytopenic purpura (ITP) is the most common cause of pediatric thrombocytopenia. It is usually a self-limiting disease; however, 20-30% of cases become chronic. In this study, we aimed to investigate pediatric ITP cases' outcomes and whether there are any factors affecting chronicity. **Methodology:** We analyzed retrospectively our 184 newly diagnosed pediatric ITP cases. Thrombocytopenia was defined as chronic ITP if it persists after 12 months. We evaluated the role of clinical and laboratory findings of patients and treatment modalities in the chronicity of ITP. **Results:** The mean age of patients was  $5.4 \pm 4.75$  years at diagnosis. As first-line treatment, 87 (47.3%) of patients were given Intravenous Immune Globulin, 65 (35.3%) of patients were given methylprednisolone, and 32 (17.4%) of patients were followed without any medication. Chronic ITP developed in 39 patients (21.1%). Chronic ITP development rate was 20.19% in

boys and 22.5% in girls ( $p=0.7$ ). While the chronicity rate was 7.02% in children younger than two years old and 17.81% in children between 2 and 6 years, it was 42.59% in children older than six years old ( $p<0.0001$ ). Mean hemoglobin and absolute lymphocyte count were significantly lower in chronic ITP patients in the 2-6 years age group. ( $p=0.014$  and  $p=0.048$ , respectively). The first-line treatment choice had no important effect on chronicity ( $p=0.61$ ). **Conclusion:** Our results suggest that the most critical factor in developing chronic ITP was the age at diagnosis. Low lymphocyte counts at diagnosis may be associated with a high chronicity ratio.

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#### RED BLOOD CELL DISORDERS

OP 18

##### CLINICAL AND LABORATORY EVALUATION OF OUR PATIENTS WITH HEREDITARY SPHEROCYTOSIS

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**Objective:** Hereditary spherocytosis (HS) is a non-immune hemolytic anemia occurring with anemia, jaundice, splenomegaly symptoms in which the cell membrane of the erythrocytes is transformed into the shape of spherocytes due to congenital membrane protein defects. In this study, the demographic characteristics, clinical and laboratory findings, as well as complications during the follow up of our patients with HS are presented. **Methodology:** All patients who were diagnosed with hereditary spherocytosis and followed in our pediatric hematology clinic between 2000 and 2021 years were included in the study. Gender, age consanguinity of the parents, family history of HS and splenectomy, the neonatal phototherapy history were retrospectively recorded from patients' files. The complaints, physical examination findings, and laboratory findings at the first admission were evaluated. Duration of follow-up, transfusion frequency, splenectomy requirement, and response to splenectomy were also recorded. **Results:** Sixty-seven patients (41 male, 27 female) were eligible for the study. The median age of diagnosis was 3 years (range 18 day-15 years). Consanguineous marriage rate was 29.9% whereas 62.7% of the patients had a family history of HS. Neonatal hyperbilirubinemia was present in 67.1% of the patients. The median follow-up period was 8.5 years. The complaints at admission were jaundice (64.2 %), fatigue (26.9 %) and fainting (7.5 %). Physical examination revealed hepatomegaly and splenomegaly in 65.6% and 77.6% of the patients, respectively. Hemoglobin mean values at the time of the admission was  $8.3 \pm 2.1$  g/dl, ranging between 5.1-15.3 g/dl. The mean MCV value was  $83.1 \pm 9.7$  fl, mean value of MCH was  $28.8 \pm 2.9$  pg, mean MCHC value was  $34.9 \pm 1.6$  g/l, mean indirect bilirubin was  $3.5 \pm 4$  mg/dl. There were various degrees of spherocytosis observed in peripheral smear examinations in all patients. Incubated osmotic fragility test confirmed the diagnosis in all cases.

During follow-up, 24 patients (35.8%) never needed a transfusion; 10 (14.9%) patients had an increased need for transfusion in infection periods; eight patients (12%) were regularly transfused, other 25 patients were transfused one or two times, not regularly. 29 (43.2%) had a splenectomy, 41% of the patients who had a splenectomy had a simultaneous cholecystectomy because of the bile sludge and gallstones identified in the ultrasound. Laboratory findings of the patients were also evaluated before splenectomy and two months after splenectomy. Hemoglobin and platelet levels increased significantly ( $p < 0.01$ ), and indirect bilirubin levels significantly decreased ( $p < 0.01$ ), but no significant difference was found in MCHC levels ( $p = 0.648$ ). Splenectomy halted transfusion dependency in 96% of patients. **Conclusion:** HS is a relatively benign form of hemolytic anemia during childhood. Despite high frequency of consanguineous marriage, familial history of HS, and neonatal hyperbilirubinemia in our cohort, most of the patients were diagnosed relatively late, around three years. This finding indicate to underrecognition of HS in primary care. One-thirds of the patients have mild disease and they can be managed conservatively. Splenectomy, in selected cases, may provide clear increase in hemoglobin levels, and decrease in transfusion need.

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#### OP 19

##### ASSESSMENT OF THE NUTRITIONAL STATUS, BONE MINERALIZATION AND ANTHROPOMETRICS OF CHILDREN WITH THALASSEMIA MAJOR

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**Objective:** Children with thalassemia major are prone to growth failure and micronutrient deficiency. In this study, we aimed to evaluate nutritional status, anthropometrics, bone mineralization defects in regularly transfused patients. **Methodology:** We analyzed the data obtained by evaluating laboratory tests, anthropometric measures, and bone mineral density. **Results:** Twenty-nine patients (62% male, 38% female) with mean age  $12.26 \pm 4.74$  years, mean pre-transfusion hemoglobin  $8.64 \pm 1.01$  g/dl, mean serum ferritin  $1158.6 \pm 556.8$  ng/ml were included. Vitamin D (72.4%), selenium (72.4%), folate (37.9%) deficiencies were the most frequent ones. In 17.2% hypocalcemia, 3.5% hypomagnesemia, in 10.3 % decreased ceruloplasmin were observed. Folate was higher between  $2 \leq$  and  $< 6$  years ( $p: 0.028$ ). Ceruloplasmin was higher between  $6 \leq$  and  $< 10$  years ( $p: 0.018$ ). Selenium was significantly higher in patients with ferritin  $\geq 1500$  ( $p = 0.008$ ). No significant ferritin-related differences were found in other micronutrients ( $p > 0.05$ ). For body mass index (BMI) 31% were under the 5th percentile, none was over the 95th percentile. For height, 24.5%, for weight 20.7% were under the 3rd, none was over 97th percentile. BMI of patients  $10 \leq$  age  $\leq 18$  years old was significantly higher ( $p = 0.001$ ). Anthropometric percentiles did not differ significantly in terms of mean serum ferritin and micronutrient levels. Hypoparathyroidism was observed in

13.8%, hypothyroidism in 3.5% of the patients. Low bone density was detected in 14.8% (2 osteopenic, 2 osteoporotic) patients. Bone mineral density did not differ significantly in terms of ferritin and micronutrient levels. **Conclusions:** Nutritional support and prevention of deficiencies are important to minimize the burden of complications, to increase the life expectancy and quality in TM patients.

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#### OP 20

##### ANEMIA AND DIETARY BEHAVIORS AMONG YOUNG ADULTS IN RIYADH, SAUDI ARABIA

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**Objective:** The study sought to assess the prevalence and the risk factors associated with anemia among male and female young adults in (Riyadh city, Saudi Arabia): Our study population showed a higher percentage of men as compared to women participants. About half of our study sample had a lightly active lifestyle, and more than one-third of the study participants were overweight (34.7%). The average age of the respondents was  $22.08 \pm 1.98$  years. **Methodology:** A cross-sectional study was conducted at King Saud University and Alfaisal University in September 2016 among young adults aged 18 to 28 years old. Data were collected using an interview questionnaire. Additionally, the respondents were evaluated clinically and via laboratory testing for anemia. The only factor significantly associated with anemia was gender, in that female gender showed a positive association with anemia. **Results:** The most specific risk for anemia among Saudi individuals of college and young professional ages (18–28 years old) was the female gender. The dietary lifestyle, heavy menstruation, pregnancy, and NSAID use were important risk factors; however, they were not statistically significant. **Conclusion:** Public awareness about anemia is important including regarding improving dietary behaviors and taking iron supplementation for prevention in high-risk people. Additionally, NSAIDs should be used with caution.

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#### IMMUNODEFICIENCIES / NEUTROPHIL DISEASES

#### OP 21

##### THE EVALUATION OF CONGENITAL NEUTROPENIA PATIENTS

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