The objective of this study was to compare iron levels of infants fed with supplementary foods because of malnutrition, to those who were supported with complementary foods from sixth months of age, when the breast milk alone is not sufficient. Eighty-four healthy infants aged 6 to 9 months were enrolled. Infants without a nutritional problem, with sufficient iron stores, weighing over 10th percentile were enrolled in the control group, while babies weighing over 3rd percentile, who were not breastfed and did not take a balanced and sufficient diet, without a chronic diseases and who were not born preterm were enrolled in the study group. All of the infants were followed for 3 months. Physical examination findings and complete blood count, iron, iron binding, ferritin, zinc test results were recorded monthly. Infants with malnutrition who could not take breast milk were supported with a follow-up formula (Bebelac). Mean ages were 7.2 ± 1.28 and 7.3 ± 1.1 months in the study and control groups respectively. Statistically significant increase was demonstrated in the MCV and iron levels of the infants supplemented with follow-up formula. MCV decreased significantly in the control group. Mean ferritin values increased from 53.2 ± 41.8 mg/L to 64.7 ± 89.7 mg/L in the study group, while decreased from 42.8 ± 34.0 mg/L to 34.6 ± 29.3 mg/L in the control group. In the study group, significantly higher levels of ferritin were measured in the last assessment, compared to the control group. In conclusion, increase in the iron stores of follow-up formula fed infants was observed during the follow-up period.

PO-0164 PAEDIATRIC SOFT TISSUE SARCOMA: A TEN YEAR REVIEW

M Pinheiro, A Maia Ferreira, A Pinto. *Pediatrics, Instituto Português de Oncologia, Porto, Portugal*

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Background and aims Paediatric soft tissue sarcomas are rare tumours that account for about 7% of all childhood cancers. 50–60% of these are rhabdomyosarcoma (RMS), while the remainder are non rhabdomyosarcoma soft tissue sarcomas (NRSTS). To evaluate the clinical characteristics, treatment modalities and outcome of paediatric soft tissue sarcomas.

Methods A retrospective analysis of data from 51 patients diagnosed and treated from 2003 to 2013.

Results 51 patients, 30 male and 21 female, median age of 10 years old at diagnosis. 92% showed a mass at diagnosis. The most common site of disease was the extremities (20 cases). Histology: 51% RMS (embryonal: 12 patients; alveolar: 12 patients; other: 2 patients) and 49% NRSTS (PNET 5 patients; malignant peripheral nerve sheath tumour: 3 patients; other: 17 patients). IRS group: 29% group I, 14% group II, 28% group III and 29% group IV. Most patients received multimodality therapy (radiotherapy, chemotherapy and surgery). 31% (16 patients) died due to disease progression: 7 alveolar RMS, 11 ≥ 10 years old and 13 group III-IV. Time from diagnosis to death was between 7 months and 5 years. Of the 34 living patients, 74% were in first complete remission. The median follow-up time was 38 months.

Conclusions Alveolar RMS is more common in the extremities and the embryonal in the genitourinary tract. NRSTS are more common in children ≥ 10 years. The absence of metastases and the tumour size ≤ 5 cm were associated with a better prognosis ($p < 0.05$).

PO-0165 PREDICTORS OF CHRONIC PRIMARY IMMUNE THROMBOCYTOPENIA

¹L Sfaihi, ¹Y Belfitouri, ²O Kassar, ¹I Maaloul, ¹TH Kamoun, ²M Elloumi, ¹M Hachicha. ¹Pediatrics, Hédi Chaker University Hospital, Sfax, Tunisia; ²Hematology, Hédi Chaker University Hospital, Sfax, Tunisia

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Background and aims The primary immune thrombocytopenia (ITP) in children has a favourable evolution in most of cases. Chronic ITP has been noted in 14–30% of the cases. This study reviewed the pattern of presentation and response to therapy in patients with ITP, in order to identify risk factors for chronic disease.

Methods We conducted a retrospective study of all cases of ITP in paediatrics and haematological departments of Hédi Chaker University Hospital in Sfax, during a period of 15 years (1995 to 2009). Predictors of chronicity were investigated using Fisher's test with a significance if $p < 0.05$.

Results 140 cases of ITP were collected including 75 girls (54%) and 65 boys (46%). The average age was 6 years 7 months (3 months to 15 years). The diffuse mucocutaneous purpura was constant and mucosal haemorrhages were present in one third of cases. The mean platelet count was $25000/\text{mm}^3$ ($1000/\text{mm}^3$ to $50000/\text{mm}^3$). Therapeutic abstention was the rule in 19 cases (14%), 111 children received corticosteroids (79%) and 10 children received immunoglobulins associated with corticosteroids (7%). Fifteen patients were lost of follow up and evolution has identified two groups: acute ITP in 95 cases (67%), and chronic ITP in 30 cases (21%). The parameters that were found as predictors of chronicity were female sex and age.

Conclusions Acute ITP is the most common. Chronic forms are found in one fifth of cases. The determination of risk factors for chronicity can make an early prognosis.

PO-0166 THE LANGERHANS CELL HISTIOCYTOSIS IN CHILDREN: STUDY OF 11 CASES

¹L Sfaihi, ¹Y Belfitouri, ¹F Kamoun, ¹I Maaloul, ¹S Alibi, ¹T Kamoun, ¹M Hachicha. *Pediatrics, Hédi Chaker University Hospital, Sfax, Tunisia*

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Background and aims Langerhans cell histiocytosis (LCH) is a rare disease of unknown cause with manifestations ranging from isolated granulomatous lesions to life-threatening multi-system organ involvement.

In this study we aimed to evaluate the characteristics, diagnosis, treatment modalities and prognosis of LCH.

Methods We conducted a retrospective study of all cases of LCH in paediatrics department of Hédi Chaker University Hospital in Sfax during a period of 16 years (1997–2013). Epidemiologic, clinical, radiological, diagnostic and therapeutic variables were collected.

Results We collected 11 cases of LCH. The average age at diagnosis was 3 years 4 months. The patients' presenting symptoms were: exophthalmia (3 cases), polyuropolydipsic syndrome (3 cases), prolonged fever (2 cases), lymphadenopathy (5 cases). Laboratory tests showed diabetes insipidus (3 cases) and bicytopenia (1 case). The diagnosis was confirmed by histopathologic examination in all cases.

Bone was the most frequently affected organ (9 cases) followed by skin (19.2%). Initially, 4 patients had single-system involvement (SS), 3 with multisystem (MS) disease without risk

organ involvement (MS-RO), and 4 multisystem disease with risk organ involvement (MS-RO). Chemotherapy based on vinblastine with corticosteroids was used in 4 patients who had MS-RO form. The outcome was favourable in 6 cases.

Conclusions Langerhans cell histiocytosis is a rare and heterogeneous disease. Multisystem disease with risk organ involvement justify the use of many drugs.

PO-0167 STUDY ON THE FREQUENCY AND CAUSES OF SEVERE IRON DEFICIENCY ANEMIA IN INFANTS AND YOUNG CHILDREN

¹C Singer, ¹P Stancu, ¹A Morosan, ²C Cristea, ²B Dumitru. ¹Ind Pediatric Clinic, University of Medicine and Pharmacy of Craiova, Craiova, Romania; ²Ind Pediatric Clinic, Emergency Clinical County Hospital Craiova, Craiova, Romania

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Objectives To study the frequency and causes of the severe iron deficiency anaemia (AF) (haemoglobin <7 g%) in infants and young children.

Material and methods We studied the observation sheets of infants and children between 1–3 years hospitalised with AF at the 2nd Paediatric Clinic, EUCH Craiova in the interval 1.01.2011–31.12.2013.

Results AF was recorded in 678 infants and 784 children, with the age between 1–3 years. Severe forms were present in 14 infants and 28 children, age 1–3 years. Mean haemoglobin: infant 5.61 ± 0.79 (4, 8–7) g%; children 1–3 years 5.45 ± 1.2 (3–7) g%. Gender distribution of AF severe forms: infant M/F: 10/4; children 1–3 years: 18/10; the backgrounds Urban/Rural: infants 3/11; children 1–3 years 6/22. Severe AF causes in infants: prematurity in 8 cases, prematurity + twins 2 cases, 3 cases with food causes, cystic fibrosis in 1 case. The causes in children with the age between 1–3 years were: food (flour + excess cow's milk) in 23 cases, food intake deficiency in: congenital heart malformations, childhood chronic encephalopathy, palatoschizis /cleft palate, Toxocara canis and parasitic infestation with uncorrected anaemia in infants born prematurely, for each situation 1 case.

Conclusions

1. Severe forms of AF frequency were 2% in infants with AF and 3.6% in children with the age between 1–3 years.

2. Rural origin was over three times higher in both age groups.

3. 2/3 of the infants with severe AF were premature/ twin; food mistakes were the AF cause in 82.1% of the children aged 1–3 years.

PO-0168 LEUKAEMIA CUTIS: AN UNUSUAL PAEDIATRIC PRESENTATION OF ACUTE LYMPHOBLASTIC LEUKAEMIA

¹E Thomas, ¹M Young, ¹M Wimalendra, ²O Tunstall. ¹Paediatrics, Plymouth Hospitals NHS Trust, Plymouth, UK; ²Department of Paediatric Haematology, University Hospitals Bristol NHS Foundation Trust, Bristol, UK

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We present the case of a 12-month-old boy presenting in February 2014 with widespread soft tissue nodules that had progressed over 5 months. They were not painful or itchy and there were no associated symptoms. He had continued to gain weight and had remained systemically well.

He had widespread subcutaneous and firm nodules over his scalp, forehead, trunk, back, abdominal wall and scrotum. They were non-tender and had no overlying skin changes. He was pale but systemic examination was otherwise normal. There was no significant lymphadenopathy or hepatosplenomegaly.

Blood tests confirmed normocytic, hypochromic anaemia (Hb 69 g/L), slightly low white cell count ($5.5 \times 10^9/L$) and normal platelet count ($198 \times 10^9/L$). Over the following week the blood count deteriorated with progressive anaemia and leucopenia with an increasing blast cell population. Tissue biopsy and bone marrow aspirate confirmed a diagnosis of pre-B cell acute lymphoblastic leukaemia (ALL) with mixed-lineage leukaemia (MLL) gene rearrangement.

Cutaneous leukaemia (*leukaemia cutis*) is a rare presentation of ALL signifying neoplastic infiltration of the skin. The appearance of skin lesions is variable and can manifest in different leukaemia subtypes (most commonly seen in acute myeloid leukaemia and in neonates). Occasionally it may be the only clinical sign of leukaemia but is invariably felt to be a poor prognostic sign.

This case describes an unusual presentation of childhood leukaemia, highlighting the importance of early skin biopsy in unusual cutaneous lesions. To our knowledge it is the first case of cutaneous leukaemia in a child with pre-B ALL with an MLL gene rearrangement.

PO-0169 AN UNUSUAL CASE OF PAINFUL PURPURA – GARDNER-DIAMOND SYNDROME

¹E Thomas, ¹M Wimalendra, ¹V Ohlsson, ²J Clinch, ³O Tunstall. ¹Paediatrics, Plymouth Hospitals NHS Trust, Plymouth, UK; ²Department of Paediatric Rheumatology, University Hospitals Bristol NHS Foundation Trust, Bristol, UK; ³Department of Paediatric Haematology, University Hospitals Bristol NHS Foundation Trust, Bristol, UK

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We present the case of a 13 year old girl who presented with spontaneous, recurrent and painful soft tissue swellings affecting her extremities. On several occasions the degree of swelling and pain was enough to consider compartment syndrome. To date she has required ten fasciotomies. On two occasions she has also had haematuria.

Baseline biochemical, haematological and radiological investigations were normal with no cause for symptoms identified. Skin biopsy showed no evidence of vasculitis. She underwent further extensive national investigations, including genetic testing for Type 4 Ehlers-Danlos syndrome. No pathological cause for purpura was found. Non-accidental and self inflicted injury were carefully considered, and excluded.

Following wide-ranging investigations and on review of her complex presentation she was diagnosed with Gardner-Diamond Syndrome (*psychogenic purpura, autoerythrocyte sensitisation syndrome*).

Gardner-Diamond Syndrome is a rare condition characterised by onset of spontaneous ecchymotic and painful lesions. The aetiology is not well understood but emotional stress is felt to be most common trigger for symptoms. Routine coagulation investigations are normal and the diagnosis is made clinically. It is therefore a diagnosis of exclusion.

This interesting case highlights a rare cause of painful purpura. A high index of suspicion was necessary to make the diagnosis. Numerous medical treatments have been trialled without any clear benefit. In this case, early administration of DDAVP has been beneficial in decreasing the progression of bruising,