to 2 groups: the first, those born to mothers with mild thrombocytopenia (100,000-150,000), and the second the ones that were born to mothers with severe thrombocytopenia (< 100,000).

Patients and Methods: During the study period we collected samples from 284 healthy term newborns, born at Assaf Harofeh Medical Center in Israel. 22 infants born to severe thrombocytopenic mothers and 176 to mothers with mild thrombocytopenia. All samples were collected within 2 hours after birth.

Results: The 2 groups did not defer regarding clinical and demographic data. Neonatal thrombocytopenia was noted among 27.3% in the severe maternal thrombocytopenia group, compared to 3.4% in the mild group (p< 0.0001).

Conclusion: Newborns born to severe thrombocytopenic mothers had a higher incidence of thrombocytopenia compared to the one born to mild thrombocytopenia mothers. The pathogenesis of this finding may be of immunologic origin. We recommend that in every case of maternal thrombocytopenia a CBC should be obtained from the offspring in order to identify this high risk population, especially if the mother has severe thrombocytopenia and should be treated accordingly.

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IRON DEFICIENCY ANEMIA IN CHILDREN WITH CONGENITAL HEART DISEASE

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Introduction: Anemia resulting from lack of sufficient iron for synthesis of hemoglobin is the most common hematological disease of infancy and childhood. The frequency of iron-deficiency anemia is related to certain basic aspects of iron metabolism and nutrition. Iron deficiency anemia (IDA) is esspecially often present in children with congenital heart dissease (CHD) caused by many different factors. This is a reason for frequent hematological examinations and iron supporting in children in need, esspecially in children with central cyanosis manifestation.

Aim: Is presenting children with CHD associated with IDA.

Methods: Laboratory analyses (hematocrit, serum iron level, hemoglobin, RBC).

Results: During the period 2009 in Children's Clinic in Pristina were analyzed 114 children with CHD where 32 of them had complex CHD. Hematological analyzes were done in admission, after 3 and 6 months. All children in admission had low level of hematological results, where 98 of them had indication for iron supplement. After 3 months of treatment 103 had normal hematological results excluding low iron serum level. After 6 months 76 children had normal hematological data while other had hematological disturbances esspecially low iron serum level despite nutrition advice for age. 4 children had high level of hematological data where hemodilution was done. At 8 children despite iron supplementation all hematological were low and needed RBC transfusion.

Conclusion: Children with CHD need continually hematological examination and in most cases iron supplement is indicated

Key words: congenital heart disease, malnutrition, iron-deficiency anemia.

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THE PREVALENCE AND PATTERN OF NEONATAL BLEEDING: VALIDATION OF A NOVEL BLEEDING ASSESSMENT TOOL (BAT)

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Background and Aims: The objective was to develop and pilot a bleeding assessment tool (BAT) for use in a neonatal setting, to standardise recording of bleeding in a high risk population.

Methods: Measurement theory was used to develop the BAT in three steps: identify patient population; item generation and reduction; item review and tool formatting. Items were generated by: literature review; review of existing bleeding scales; expert opinion. The BAT was reviewed and modified by local neonatal/haematology focus groups. The tool was used to assess daily bleeding prospectively in all neonates requiring high dependency or intensive care in a single tertiary NICU over a 4 week period. A number of assessments were repeated by a second independent assessor. Inter-rate reliability was calculated as percentage of matching records.

Results: 23 neonates were assessed with total of 241 daily records. Median birth weight was 1400 (IQR 900-2400)g. Median gestational age at birth was 30 (IQR 27-36) weeks. Incidence of bleeding (represented as bleeding days/study days) was: major 14/227 (6%); moderate 130/227 (57%); minor 26/227 (11%). The median lowest platelet count was 164 (IQR 80-264). 53/63 (84%) daily duplicate assessments performed correlated. The most frequent form of minor bleeding was microscopic haematuria (6%).

Conclusions: The BAT may provide a useful method for the systematic recording of bleeding in neonates, and be of value in clinical trials. Rates of major bleeding are low but 74% of infants show evidence of bleeding, although the clinical significance of many types of bleeds remains unclear.

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HOME TREATMENT FOR HAEMOPHILIA PATIENTS: CHALLENGES WITH ADHERENCE

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Aim: To determine adherence to home treatment prophylaxis, documentation of bleeding history and return of recording sheets to the regional centre for haemophilia patients.

Method: All severe haemophiliacs who are currently on a home treatment prophylaxis programme during a one year period were identified. A retrospective chart review was undertaken and information regarding factor usage and bleeding episodes was collected.

Results: 28 haemophilia A patients and 3 haemophilia B patients were identified. The mean age at commencement of home treatment was 3.68 years, and the mean length of time each of the patients had been receiving home treatment was 6.1 years. 46.7% of patients were prescribed factor 3 times per week, with 26.7% of patients prescribed factor more frequently and 26.7% prescribed factor less frequently. A third of the patients returned at least some of the home recording sheets, however only 40% of the return sheets included both factor usage and bleeding episodes. 30% didn't record any bleeding episodes on return sheets to correlate with documentation of episodes in hospital notes. The mean number of recorded bleeding episodes from patient notes was 5.6. Of the 5 patients who recorded bleeding episodes on the return sheets, the mean number of episodes was 4.6. The percentage factor used compared to predicted annual usage ranged from 55%-147% with a mean of 81.3 %. Only 2 patients collected more factor than predicted.

Conclusion: Only a third of patients are using the recording sheets. The mean factor usage is comparable to reported levels in Europe.

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DETERMINANTS OF RED BLOOD CELL TRANSFUSIONS IN A PEDIATRIC CRITICAL CARE UNIT: A PROSPECTIVE, DESCRIPTIVE EPIDEMIOLOGICAL STUDY

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Objective: To determine the incidence and to cherecterize the determinants of red blood cell transfusions in critically ill children.

Sesign: Prospective, descriptive epidemiologic study.

Patients: Critically ill children.

Setting: A single-center, multidisciplinary, tertiary care level, university-affiliated, pediatric intensive care unit (PICU).

Interventions:

None.

Measurements and main results: Of 425 consecutive admissions over a 9 months period, 286 were retained for study. At least one transfusion was given in 52.3 % of cases. Incidence rate of transfusion was 688 transfusions/1.000 cases. Possible determinants of red blood cell transfusions were identified and prospectively monitored during PICU stay until a first transfusion event (transfused cases) or until the time of death or discharge from PICU (non-transfused cases). Three significant determinants of a first red blood cell transfusion event were retained in the multivariate analysis: a pre-transfusion hemoglobin level < 9.5 g/dL (OR: 35.97, CI: 10.B3-119.51, p < 0 .0001), an admission diagnosis of cardiac disease (OR: 3.58, CI: 1.21-10.55, p < 0 .02), an admission Pediatric Logistic Organ Dysfunction (PELOD) score >20 (OR: 8.62, CI: 2.09-35.74, p < 0 .0001).