concept arises from 4 phases of growth: phase of intrauterine growth, phase of completed postnatal adjustment in first 3 weeks of life forming a percentile below birth percentile, phase of stable growth targeting birth weight percentile at 42+0/7 week, according to Fenton chart and phase of preterm infant growth after term age monitored with WHO growth charts. The aim of this study is to present a new approach for personalized postnatal growth trajectories for preterm infants and to compare them with growth percentiles of our patients. This concept still needs to be validated in a larger sample size. Data from 39 preterm infants gestational age (GA) 29-33+6/7 weeks and birth weight (BW) < 2000g were collected. Retrospective, for every infant, a new personalized growth chart was drawn using online calculator (https://www.growthcalculator.org/) and was compared with existing growth trajectory measured from birth to discharge. The difference between measured (MW) and predicted weights (PW) of our patients were calculated and analyzed, together with their characteristics, comorbidities, treatment and nutrition. Preliminary results show that the most of them (N=22) deviated less than 5% of ideal weight (PW) and there were no differences between sexes. Statistically significant deviation in median for MW and PW was noticed in a preterm infants GA > 32 weeks. Remaining results will be presented after analysing data of total number of patients collected from hospital records from period 2018 to 2020. Adjusting nutrition in the earliest phase of postnatal life towards an ideal personalized growth trajectory, can have an optimal impact in growth, body composition and neurodevelopment of the infant and can reduce the risk of some early onset adult metabolic and cardiovascular diseases. Therefore, it is necessary to create more precise tools in monitoring growth of preterm infants, such as personalized growth trajectories.

Kaposiform haemangioendothelioma with Kasabach-Merritt phenomenon in a newborn: a case report

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Kaposiform haemangioendothelioma (KHE) is a rare vascular tumor and has high mortality rate in newborns when associated with Kasabach-Merritt syndrome (KMS) due to consumptive coagulopathy.

Methods Female newborn, GA 30 w, BM 2220g, due to the threatening asphyxia, born by S.C., with respiratory distress syndrome (RDS) and extremely massive soft tissue purple tumor with swollen erythematous, inhomogenous skin. The tumor was spread over lower abdominal wall, vulva, gluteal region, whole right tight and upper part of the left tight. The baby was anemic (Hb 97 g/l), trombocytopenic (8x109/L) with consumptive coagulopathy (immeasurable fibrinogen). RDS was treated with exogenous surfactant and mechanical ventilation. As soon as possible she received packed red blood cell transfusion, platelet transfusion, fibrinogen concentrate, INN-epatog alfa (activated). On the ultrasound of the abdomen paralytic ileus and hemorrhagic effusions were found. Doppler ultrasound of the tumor expressed heterogenous echogenicity and hypervascular pattern. Hour by hour the tumor grew larger. In spite of all intensive treatment baby developed multiorgan failure (MOF) and died in the of 18 hours.

Results Pathohistologically, the tumor consists of irregular, predominantly small and slit-like vascular spaces lined with spindle endothelial cells which sometimes form nodular structure. On immunohistochemistry the spindle cells had positive reaction for CD31, CD34, D2-40 and negative reaction for GLUT-1. The finding corresponds to KHE.

Conclusions We report a premature born neonate with a huge KHE associated with fulminant form of KMS and developed consumptive coagulopathy resulting in multiorgan failure and death within 18 hours.

Drug-induced enterocolitis syndrome (DIES) is an uncommon, non-IgE-mediated drug hypersensitivity reaction that can be severe and potentially life-threatening disease. Because of the clinical resemblance with enterocolitis syndrome induced by food proteins (FPIES), DIES is also called ‘FPIES-like’ reaction and similar diagnostic criteria are proposed. We report the case of a 6-year old girl who was admitted to our Department for an oral challenge test with amoxicillin (AMX).

She was under the supervision of pulmonologist for recurrent wheezing episodes. During the outpatient-follow up mother reported multiple reactions after the ingestion of amoxicillin +/- clavulanic acid. After the first administration of oral suspension girl developed an erythematous skin rash, abdominal pain followed with an acute episode of repetitive vomiting.

Next two administrations were followed with a short period of drowsiness, abdominal pain, repetitive vomiting and severe diarrhea 1-2 hours after drug ingestion. The symptoms spontaneously resolved within 24 hours. During the last reaction parents called an ambulance because of drowsiness and poor general condition after severe vomiting and diarrhea, and girl was treated shortly with intravenous infusion.

In the allergy study performed, specific IgE to amoxicillin was negative as well as basophil activation test for Augmentin®.

Consecutively, we performed an open 3-step graded oral provocation test with AMX in a hospital setting according to the published guidelines. Approximately 3 hours after receiving the first dose (5 mg) and 1 hour after the second dose (50 mg), she developed severe abdominal pain, nausea and repetitive vomiting, and two hours later she became pale and developed severe diarrhea. During the reaction, she had no cutaneous or respiratory symptoms, and she remained hemodynamically stable. A blood test obtained 1 hour after the onset of the reaction showed normal complete blood cell count. She was parenterally hydrated. Approximately 5-6 hours after onset of symptoms she showed progressive improvement to a complete recovery.

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142 Drug-induced enterocolitis syndrome (DIES) in 6-year old girl

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Drug-induced enterocolitis syndrome (DIES) is an uncommon, non-IgE-mediated drug hypersensitivity reaction that can be severe and potentially life-threatening disease. Because of the clinical resemblance with enterocolitis syndrome induced by food proteins (FPIES), DIES is also called ‘FPIES-like’ reaction and similar diagnostic criteria are proposed. We report the case of a 6-year old girl who was admitted to our Department for an oral challenge test with amoxicillin (AMX).

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