periungual peeling of fingers and elevated PLTs appeared. After the therapy administration, eosinophilia was observed. The periodic cardiological evaluation was negative.

Learning points/Discussion Features of KD are similar to those found in certain illnesses which are caused by toxin-producing bacteria such as scarlet fever.

Certain patients require more than one dose of IVIG before demonstrating an effect because there is a threshold level of IgG which is necessary to reduce the clinical signs of inflammation.

The identification of causative agents will result in the development of less expensive and more specific therapies.

P397 MICROBIOLOGY OF GRAM-POSITIVE BLOODSTREAM INFECTIONS IN CHILDREN IN MINSK

¹Katsiaryna Serhiyenka*, ¹Oksana Romanova, ²Aleksey Lazarev. ¹Belarussian state medical university, Minsk, Belarus; ²City children's infectious clinical hospital, Minsk, Belarus

10.1136/archdischild-2019-epa.743

The aim of this study was to investigate the role of gram-positive bacteria in the structure of pathogens isolated from blood cultures, to update later approaches to empirical therapy and to compare our data with current trends worldwide.

Material and methods In a retrospective study from 2009 to 2017, the etiological structure of identified blood flow infections was studied. The study was conducted in the viral and bacteriological laboratory of the City children's infectious clinical hospital in Minsk. Only for the period allocated 654 pathogen cultured from blood cultures 515 patients aged from 3 weeks to 18 years old. In patients with clinical signs of systemic infection (chills, tachycardia, hypotension, oliguria, impaired consciousness, behavior, rash, etc.) on the background of fever 38°C and above, blood was taken for microbiological examination. For the analysis of the etiological structure recorded of any pathogen isolated from blood cultures. A blood culture was considered positive when a single isolation of the pathogen. With the simultaneous or sequential release of several microorganisms belonging to different species, all strains were included in the analysis. The repeated selection of identical the causative agent in the statistical analysis of the pathogen fell only once. Hemocultures were isolated using a BacT/alerT 3D hemoculture analyzer using commercial culture media (BacT/alerT SA, BacT/alerT SN, bioMérieux, France). Identification of microorganisms was carried out on the automatic microbiological analyzer Vitek 2 Compact (bioMérieux, France).

Results According to the results of the study, the proportion of gram-negative bacteria in the structure was 31.7% (n=208), gram-positive bacteria – 61.9% (n=404), fungi – 6.4% (n=42). During the analyzed period, the predominance of gram-positive microorganisms in the structure of bacteremia remains.

The structure of gram-positive bacteria (n=404) was dominated by staphylococci (62.1%), with the most frequently isolated coagulase-negative types (n=212; 84.5%). Among all staphylococci (n=25.1), the most frequently isolated cases were *S. epidermidis* – 63.3%, and *S. aureus* – 15.1%. The spectrum of streptococci (n=66) was as follows: *Str. viridans* groups (42.4%), *Str. pneumonia* (27.3%), *Str. agalacia* (19.7%) and *Str. pyogenes* (10.6%). Enterococci were isolated in 31

patients (7.7% of cases), with almost the same frequency met *Enterococcus faecalis* and *Enterococcus faecium* (41.9% and 38.7%, respectively). During the study period, 7 (1.7%) strains of *Corynebacterium* spp. were isolated. The data obtained by us fully correspond to modern studies from other countries, according to which the most common pathogens of blood flow infections are coagulase-negative staphylococci (especially epidermal).

P398 A CASE OF NEONATAL PLASMODIUM VIVAX MALARIA CAUSED BY EXCHANGE TRANSFUSION IN A G6PD DEFICIENT BABY

Muhammad Ayyaz*, Syed Muhammad Hassan, Yaseen Badar. *Saidu Group of Teaching hospital, Swat, Pakistan*

10.1136/archdischild-2019-epa.744

Neonatal malaria is one of the differential diagnosis of sepsis in malarial endemic areas. Neonatal malaria is often ignored and missed as it is considered to be very rare. Transfusion acquired malaria is among the causes of neonatal malaria, as blood is rarely screened for malarial parasite. Here we present a unique case of neonatal malaria caused by exchange transfusion, which was done for indirect hyperbilirubinemia in a G6PD deficient baby.

P399 APPLICATION OF A RAPID STREP TEST IN THE IDENTIFICATION OF BETA HAEMOLYTIC STREPTOCOCCUS GR. A (STUDY CONDUCTED IN DRACEVO AND ITS SURROUNDING)

¹Svetlana Smugreska*, ¹Mitka Trencheva, ²Velibor Tasic. ¹private Paediatric Practice, Skopje, Macedonia, The Former Yugoslav Republic Of; ²children's Clinic -Nephrology Department, Skopje, Macedonia, The Former Yugoslav Republic Of

10.1136/archdischild-2019-epa.745

Introduction Most common cause of the major upper respiratory infections is Beta haemolytic streptococcus gr A. It can cause pharyngitis, tonsillitis, scarlet fever, otitis, sinusitis and it can trigger skin infections such as: impetigo, phlegmon, erysipelas. It has seldom been considered to be the cause of peritonsillary abscess, supravital meningitis, septic shock.

Objective Rapid strep test provides prompt diagnosis and implementation of appropriate therapy. Complications such as APSGN, as well as rheumatic fever, vasculitis etc. are preventable.

Methods and materials A study on sample of 380 children at the age of 3 to 13 years has been conducted. All of them have simultaneously undertaken a rapid strep test and a microbiological culture with a waiting period of 2 to 3 days. The research involves two groups of children: the first one engages 267 children with two parallel symptoms: sore throat and lymph glands; sore throat and abdominal pain, sore throat and neck pain, high temperature followed by headache etc.

The second group contains of 113 children, facing with tonsillitis, high temperature, Ly glandulae on neck, vomiting followed by abdominal pain.

Both groups of children underwent a rapid strep test, which has immediately confirmed the diagnosis, while the results of the microbiological culture came after 2–3 days.

It is noteworthy to mention that all children of the sample, have been treated in my paediatric practice.

Conclusion The comparative study confirmed that the rapid strep test is accurate in 97% of the examined cases. Namely, the parallel analyses consisting of rapid strep test and microbiological swabs in 269 children out of 380, have shown identical results.

Therefore, a rapid strep test is ought to be done by every doctor, in order to come up with a prompt diagnosis and therapy, prevent diseases, as well as promoting rational use of antibiotics.

P400 QUALITY OF LIFE IN CHILDREN WITH INFLAMMATORY BOWEL DISEASE

Anna Silonyan*, Andrey Surkov, Vladislav Chernikov, Elena Kulebina. *National Medical Research Center for Children's Health, Moscow, Russian Federation*

10.1136/archdischild-2019-epa.746

Introduction Health-related quality of life (HRQOL) is an important indicator of the health status of children. In the Russian Federation in children with inflammatory bowel disease (IBD), this aspect has not been studied enough, but these data may help in the choice of tactics for maintaining patients.

Purpose of the study Rate HRQOL of children with IBD.

Participants and methods 54 children with IBD were examined: 28 children (12 boys and 16 girls) with Crohn's disease (CD) and 26 children (15 boys and 12 girls) with ulcerative colitis (UC). The median age was 15 years 4 months [13 years 1 month; 17 years 11 months]. The control group included 64 relatively healthy children, matched by age and sex. HRQOL was estimated using different age units of the children's form of the overall PedsQL questionnaire on a scale from 0 to 100 points, according to the following aspects: 'Physical Functioning' (PF), 'Emotional Functioning' (EF), 'Social Functioning' (SocF), 'School Functioning' (SchF), 'Total Scale Score' (TS). To describe the data we used the median, 25th and 75th percentiles. Comparison of two independent groups by quantitative traits was carried out using the non-parametric method using the Mann – Whitney U-test.

Results When evaluating the indicators of HRQOL of patients with IBD and control group children, significant differences were obtained in the aspects of PF: 71.0 (58.25; 87.75) versus 87.0 (78.75; 93.0) points, $p < 0.001$; EF: 65.0 (50.0; 80.0) versus 75.0 (61.25; 85.0), $p = 0.046$; SchF: 60.0 (45.0; 78.5) versus 75 (60; 90.0), $p = 0.004$ and TS: 69.57 (58.7; 80.71) versus 82.0 (73.25; 88.0), $p < 0.001$. When comparing the responses of children with CD and UC, there were no significant differences in all scales of the questionnaire ($p > 0.05$).

Findings The study found significant differences in the form of lowering HRQOL in children with IBD of relatively healthy peers in almost all aspects, which must be considered when managing patients with this chronic pathology.

P401 DYNAMICS OF QUALITY OF LIFE IN CHILDREN WITH IDIOPATHIC ARTHRITIS DURING ETANERCEPT THERAPY

¹Anna Fetisova, ^{1,2}Ekaterina Alexeeva*, ^{1,2}Tat'yana Dvoryakovskaya, ¹Vladislav Chernikov, ¹Irina Vinyarskaya, ¹Margarita Soloshenko, ¹Rina Denisova, ¹Kseniya Isaeva, ¹Anna Mamutova. *¹National Medical Research Center for Children's Health, Moscow, Russian Federation; ²Sechenov First Moscow State Medical University (Sechenov University), Moscow, Russian Federation*

10.1136/archdischild-2019-epa.747

Objectives To assess the influence of the genetically engineered biologic drug etanercept on the quality of life of patients with juvenile idiopathic arthritis (JIA).

Methods The research included 85 children with poly- and oligoarticular variant of the JIA at the age of 5 (2; 17) years. The assessment of the quality of life of patients was carried out by means of the parental version of a special questionnaire CHAQ (Childhood Health Assessment Questionnaire), Health Utilities Index Mark 3 (HUI3) questionnaire. The doctor and parents of the patient also assessed the global activity of the illness by the 100-mm visual analog scale (VAS) before the etanercept prescription and in 1, 6 and 12 months. All patients before the etanercept prescription received immunosuppressive agents.

Results Impressive increase in an average point of the quality of life (the response in 1 month after the therapy beginning) was noted by the attributes of a questionnaire of HUI3 «emotions» — from 0.82 (± 0.18) to 0.90 (± 0.13), $p = 0.001$, «cognitive abilities» — from 0.85 (± 0.17) to 0.91 (± 0.18), $p = 0.006$, and «pain» — from 0.78 (± 0.23) to 0.91 (± 0.1), $p < 0.001$. In 12 months of the treatment the average point of the quality of life raised also by such attributes as «locomotivity» — from 0.85 (± 0.3) to 0.99 (± 0.06), $p < 0.0001$, and «fine motor skills» — from 0.9 (± 0.19) to 0.98 (± 0.05), $p < 0.001$.

Conclusions Treatment with the etanercept provided the improvement of the quality of life of children with the JIA and their families, improvement of physical activity and emotional state of patients.

P402 RECOGNISABLE PATTERNS TO CHILDHOOD EXPERIENCES OF MIND FORMATION

Peter Kearney*. *University College, Cork, Ireland*

10.1136/archdischild-2019-epa.748

The title deliberately echoes Smith's book on *Recognizable Patterns of Human Malformation* first published in 1970. Smith's patterns relate to antenatal events, whereas patterns that shape our minds relate to special experiences during childhood. As Paediatricians we are very familiar with incremental formation which we chart by measuring growth and evaluating development. We are less au fait with special experiences that shape our minds probably because Anthropology has been peripheral to medical education. The boundaries of different sciences are blurring as interest in the formation of our minds draws on many disciplines. Our deep interest in biological child health aims to treat and prevent diseases from the newborn to adolescence. Biology is not the whole story. The great status