vaccination is the most effective method of preventing infectious diseases. The majority of parents (80%) understand that vaccinated children are less likely to develop severe illness than those who have not been vaccinated. More than half of respondents (60%) are not satisfied the quantity with quality of information about vaccinations obtained from the doctor.

Conclusion The findings suggest that the majority of parents have a generally positive attitude toward vaccination and consider it necessary. However, respondents showed insufficient awareness of vaccination problems. Therefore, educational events should be planned and new methods of work should be developed to raise awareness about vaccination among parents.

P616

THE APPROACHES FOR EARLY DETECTION IMMUNE PERTURBATION IN CHILDREN LIVING IN URBAN AREAS WITH ADVERSE ENVIRONMENTAL

¹Alfia Aminova*, ²Alefina Akatova, ²Olga Vozgament, ¹Zarnigar Gumbatova, ¹Tatiana Eryushova, ¹Galina Borodina. ¹Federal State Autonomous Educational Institution of Higher Education I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation (Sechenov University), Moscow, Russia, Moscow, Russian Federation; ²Federal Scientific Center for Medical and Preventive Health Risk Management Technologies, Perm, Russia, Perm, Russian Federation

10.1136/archdischild-2019-epa.947

Background The objective was to determine the approach of early detection immune perturbation in the children living under exposure to organic compounds with immunotoxicity. Although the impact of man-made environmental factors on the immune system is proven by clinical and immunological findings, many issues remain unsolved. Comprehensive studies analyzing humoral and cellular immunity are extensive, and few studies addressed definition of screening examination method.

Material and methods The comprehensive profound examination of 429 children at the age of 13–15 years living near the oil-refining complex has been carried out. All children were divided into groups based on the degree of man-made environmental factors impact and the ratio of echostructure changes in the spleen. The standard complex of clinical laboratory diagnostic technique was used in the presented study.

Results All the examined children have been divided into two groups. 1st group comprised 256 children who had significant ultrasonic changes of the spleen (multiple hypoechogenic homogeneous inclusions throughout the ultrasonic section of the organ). In the 2nd group (236 children) the ultrasonic examination had no disturbances of spleen (echostructure was homogeneous and fine-gritted). The chemical and analytical analysis of children's blood of children have been obtained statistically significant differences of the number of indicators for immune profile of children without disorders of spleen's echostructure (2nd group) vs the 1st group ($p \leq 0.05$). It was determined that children living in areas with technogenic pollution had significantly increased expression of CD19 +receptor and CD25 +receptor on T-lymphocytes (by relative and absolute measure) compared to the children's group living within the territory of minimal technogenic pollution ($p < 0.05$). The cause-effect relations between the existing deviations of the immunograms and the content of ecotoxins in the blood were proved by the mathematical model method.

Conclusion The diagnostic value of spleen's ultrasound spleen examination with the determination of the changes type in the parenchymatous tissue was determined and can be recommended as a screening method for assessment the impact of man-made environmental factors on the immune system of children living in urban areas.

P617

PRIMARY IMMUNODEFICIENCIES (PID) OF THE CHILD: ABOUT 16 CASES

¹Bayene Maalej, ¹Imene Moalla, ¹Manel Wali, ¹Muhamed Muzaker, ²Chiraz Regaieg*, ²Abdelatif Gargouri, ¹Faiza Safi, ¹Manel Hsairi, ¹Lamia Gargouri, ¹Abdelmajid Mahfoudh. ¹Pediatric Emergency and Resuscitation Department Hedi Chaker University Hospital, Sfax, Tunisia; ²Neonatology Department Hedi Chaker University Hospital, Sfax, Tunisia

10.1136/archdischild-2019-epa.948

Introduction Primary immunodeficiency disorders (PIDs) in children are genetic diseases that affect adaptive or innate immunity. The importance and nature of the clinical signs depend on the deficit function predominantly within the immune system.

Objective To study the epidemiological, clinical, paraclinical, therapeutic and evolutionary characteristics of PID in children.

Patients and methods A retrospective study of 16 cases of primary immunodeficiencies (PID) of the child collected at the pediatric emergency and resuscitation department Hedi Chaker University Hospital Sfax over a period of 15 years (2004–2019).

Results 14 boys and 2 girls, mean age 3 years (range 2 months to 10 years). A notion of consanguinity was present in 15 cases. The respiratory manifestations were revealing in 9 cases. Five patients had impaired expression of HLA class II molecules, 4 patients had agammaglobulinemia, 5 patients had chronic septic granulomatous disease, 2 patients had hyper IgM syndrome and one patient had ataxia telangiectasia. Therapeutically all our patients have benefited from symptomatic treatment based on veinoglobulins. The outcome was favorable in 6 patients, one patient had hematopoietic stem cell transplantation, 4 patients had frequent hospitalisations for infections, and 5 patients had died.

Conclusion A better knowledge and characterization of the different immunodeficiencies allows an improvement of the care of these patients both preventive and curative, adapted to the deficit, as well as a more precise genetic advice.

P618

SYSTEMIC LUPUS ERYTHEMATOSUS OF THE CHILD: STUDY OF 6 CASES

¹Bayene Maalej, ¹Imene Moalla, ¹Manel Wali, ¹Sahar Trichilli, ²Manel Charfi*, ²Abdelatif Gargouri, ¹Faiza Safi, ¹Manel Hsairi, ¹Lamia Gargouri, ¹Abdelmajid Mahfoudh. ¹Pediatric Emergency and Resuscitation Department Hedi Chaker University Hospital, Sfax, Tunisia; ²Neonatology Department Hedi Chaker University Hospital, Sfax, Tunisia

10.1136/archdischild-2019-epa.949

Objective To study the clinical, therapeutic and progressive features of systemic lupus erythematosus (SLE) in children.

Patients et methods A retrospective study of 5 cases of childhood SLEs collected at the Pediatric Emergency and Resuscitation Department Hedi Chaker University Hospital Sfax over a period of 13 years (2006–2018).

Results These are 3 girls and 3 boys. The age of onset of symptomatology ranged from 9 years to 13 years. The telltale

signs were cutaneous (4 cases), articular (3 cases), renal (2 cases) and hematological in 1 case. The clinical picture was very polymorphic. Neurological involvement was found in 3 cases, whereas serous effusion was noted in 2 cases. One patient developed a macrophage activation syndrome. One patient required hemodialysis sessions. One patient presented stage D pancreatitis. One patient had associated chronic septic granulomatous disease. Immunologically, all patients had elevated anti-nuclear Ab antibodies, 3 had native anti-DNA Ab, and two patients had anti-Sm positive Ab. Therapeutic options were: corticosteroids + Endoxan® (4 cases), corticosteroids and plaquenil® (1 case) and plaquenil® + aspirin® (1 case). Two patients died and a favorable outcome was noted in four other patients.

Conclusion SLE is a rare autoimmune disease in children. The clinico-biological picture is polymorphous with the possible involvement of multiple organs. The prognosis is conditioned by the renal damage.

P619 REVIEW OF EPIDEMIOLOGY AND MANAGEMENT OF CHILDREN WITH PERIORBITAL AND ORBITAL CELLULITIS

¹Amruta Fulmali*, ²Dhani Bux. ¹North Devon District Hospital, Barnstaple, UK; ²University Hospital Waterford, Waterford, Ireland

10.1136/archdischild-2019-epa.950

Aim To study epidemiology and management of Periorbital and orbital cellulitis in children admitted in University Hospital Waterford, Ireland.

Methods The medical records of children ≤16 years old and hospitalised from 01/01/2007 to 31/12/2017, at the University of Hospital Waterford with discharge code ICD-10-AM indicating diagnosis of acute inflammation of orbit were reviewed.

Results Total 33 cases were included in this study.

Abstract P619 Table 1

	Orbital cellulitis (Total 9 cases)	Periorbital cellulitis (Total 24 cases)
Mean Age	7 years	7.8 years
Male: Female ratio	3.5	2.57
Eye swelling	9	24
Headache	0	3
Sepsis	0	1
Vomiting	0	0
Total cases who had FBC done	9/9	23/24
↑WBC	6	8
↓WBC	0	2
Total cases who had CRP done	5/9	14/24
↑CRP	5	12
Total cases where blood culture was sent	8	17
Blood Culture +ve	0	1 (Coagulase Neg staph)
Total Cases where CT was done	9	11
Abnormal CT Scan	9	7
Ophthalmological Examination	9	23
ENT consultation	8	13
Paediatric/Medicine Consultation	7	23
Surgical drainage	9	0
Local Antibiotic guideline followed	3	1
Mean Duration of stay inpatient	10.5	5

Conclusion Literature says periorbital and orbital cellulitis typically affects a child under 5, but our main population was between 5–16 years with mean age of 7.8 years. Periorbital cellulitis occurs as a complication of sinusitis. All 9 children with orbital cellulitis had radiological evidence of sinusitis and 7 (29%) out of 24 children with periorbital cellulitis had radiological evidence of sinusitis. So, >70% children with periorbital cellulitis had source of infection other than sinusitis. Total of 9 children had Subperiosteal abscess which required drainage.

Discussion Epidemiology of Periorbital infections in Paediatric Population in that particular area was slightly different compared to the literature. Fortunately all children had good outcome after the appropriate treatment.

P620 DISSEMINATED *BARTONELLA HENSELAE* INFECTION-CASE REPORT

Diana Andreea Ciortea*. 'Carol Davila' University of Medicine and Pharmacy Bucharest, Bucharest, Romania

10.1136/archdischild-2019-epa.951

Cat scratch disease is caused by *Bartonella henselae*- a fastidious gram-negative bacillus, and it has in most cases a self-limited evolution. However, it represents a challenge for diagnostic and treatment in immunosuppressed patients or in atypical and disseminated forms. We present the case of a 5-year-old immunocompetent child, who was admitted into the hospital for fever and left peri-auricular adenopathy. After 7 days of antibiotic treatment with beta-lactams, the fever was persistent, and diffuse abdominal pain was associated. An abdominal-CT scan examination was performed, which showed hypo-attenuated focal lesions in the splenic and hepatic parenchyma, with subsequent micro-calcifications. Thus, the patient was diagnosed with disseminated *Bartonella henselae* infection, and secondary hepatic and splenic micro-abscesses, based on the combination of the epidemiological, clinical, imaging and serological criteria. The clinical evolution was favorable after 6 weeks of antibiotic treatment with a macrolide (azithromycin) associated for 2 weeks with an aminoglycoside (gentamycin).

P621 HYDATIDOSIS IN INFANTS: WHAT NOT TO BE MISSED

Lamia Gargouri, Imen El aoud, Fatma Hammemi, Chiraz Regaieg*, Faiza Safi, Abdellatif gargouri, Zeineb Mnif, Mounir Ben Jemaa, Makram Koubaa, Abdelmajid Mahfoudh. Hédi Chaker, Sfax, Tunisia

10.1136/archdischild-2019-epa.952

Hydatidosis remains a major health problem in our country. In infants, pulmonary localization is more frequent while in adults the liver is the most affected site. It has many clinical and radiological features that may delay the diagnosis.

The aim of our study is to delineate some of the important characteristics of this affection in the pediatric population and to remind the atypical localization.

We lead a retrospective study over 29 years in the pediatric department of patients under the age of 18 years old. 23 patients were enrolled. We counted 18 males and 5