P394 SCHISTOSOMIASIS IN IRELAND, A CASE REPORT

¹Lubna Mahmood*, ¹Abrar Haider, ²Wasim Asif. ¹St. Luke's Hospital, Kilkenny, Ireland; ²St. Luke's Hospital, Kilkenny, Ireland

10.1136/archdischild-2019-epa.740

Introduction Schistosomiasis is a parasitic disease caused by flukes (trematodes) of genus *Schistosoma*. After malaria and intestinal helminthiasis, schistosomiasis is the third most devastating tropical disease in the world, being a major source of morbidity and mortality for developing countries in Africa, South America, Caribbean, Middle East and Asia.

Presentation Nine years old boy presented to outpatients with history of intermittent haematuria for last seven months. Urine was bright red to pink in colour at the end of micturition. He recently visited his grandparents in Sudan where he had been swimming in river Nile. There was no history of trauma, no history of UTI.

Findings On examination, blood pressure was normal, he was circumcised. Systemic examination was unremarkable.

FBC, U&E, LFTS, C3, C4, ASO titre and throat swab were normal, urine protein to creatinine ratio was normal however he has intermittent +1 blood on urine dipstick.

Urine microscopy showed 50 white cells and 60 red cells, urine and stool cultures were negative. Serology revealed *Schistosoma* ELISA positive at level 7.

Abdominal X-ray did not show any renal tract calculus. Renal ultrasound showed thickened bladder wall of 6 mm.

Treatment He was treated with PRAZIQUANTAL 40 mg/kg PO one dose only. One week after this treatment, his haematuria resolved and he had no further complaints.

Discussion Schistosomiasis is a disease caused by infection with parasitic blood flukes. These parasites live in certain types of freshwater snails. Individuals can become infected when skin comes in contact with contaminated water. The approach to diagnosis for returned travellers differs from the approach to diagnosis in endemic settings. Among returned travellers, serology is the most useful test, but it does not reflect definitive evidence of ongoing infection.

Diagnostic tools include direct assays (demonstration of eggs in the stool or urine via microscopy, or demonstration of antigen or DNA in the blood, urine, and/or stool) and indirect assays (demonstration of antibody in blood via serology).

Patients with schistosomiasis be treated promptly with Praziquantel in the presence or absence of clinical manifestations. A single dose of Praziquantel reduces the parasite burden substantially.

P395 A CASE OF POTT'S PUFFY TUMOUR IN AN 11 YEAR OLD BOY

Jonathan Clarke*, Megan Gilcreest, Ann Leahy. Cavan General Hospital, Cavan, Ireland

10.1136/archdischild-2019-epa.741

Case Report CH presented to Cavan General Hospital with a one day history of erythema and swelling over the right eye. This was associated with fever, lethargy and pain. CH was unable to open his right eye fully. There was normal visual acuity and eye movements. Diplopia was not a feature. The initial differential was periorbital cellulitis.

CT brain was performed and showed no evidence of intracranial pathology and no suspicious bone lesions. Pansinusitis

was shown. He had a WBC of 22.9 (neutrophils of 20.6) and a CRP of 110.

CH was started on antibiotics as per local guidelines (ceftriaxone and clindamycin).

On day 4 of admission CH developed diplopia on lateral gaze. A repeat CT showed increased inflammatory changes of the right maxillary and frontal sinuses, infraorbital soft tissue density under the superior orbital wall and proptosis suggestive of orbital cellulitis. It also showed subcutaneous soft tissue swelling suggestive of underlying abscess formation. MRSA was also grown on a nasal swab with Vancomycin started to cover.

An MRI brain was performed which showed soft tissue oedema around the right orbit, osteomyelitis of the right frontal bone, as well as small subperiosteal collections extending into the right medial orbit and an intracranial subperiosteal collection. These findings confirmed a diagnosis of Pott's Puffy tumour.

Treatment involved adding metronidazole and rifampicin. FESS (functional endoscopic sinus surgery) with drainage of the orbital abscess was performed in Temple Street Children's Hospital. IV antibiotics were eventually stopped one month from presentation and CH was discharged home on PO antibiotics for a further 3 weeks having made an excellent recovery.

Discussion Pott's Puffy tumour was first described by Dr Perival Pott in 1760. It is characterised by osteomyelitis of the frontal bone with associated subperiosteal abscess. This presents as a fluctuant, tender swelling over the forehead. It is a life threatening complication of infectious sinusitis.

Complications include intracranial extension with epidural abscess, subdural empyema, meningitis and cerebral abscess. Treatment is through surgical drainage and prolonged IV antibiotics.

P396 KAWASAKI DISEASE AND GROUP A STREPTOCOCCAL INFECTION: A CASE REPORT

Triantafyllia Tsaprouni*, Vasiliki Melikoki, Evridiki Vouloumanou. Tzaneio General Hospital, Pireus, Greece

10.1136/archdischild-2019-epa.742

Background Kawasaki disease (KD) is an acute multi-system vasculitis which primarily affects children. Although the etiology remains unknown, it seems that KD is a response to superantigens in genetically susceptible individuals. It was reported that treatment with intravenous immunoglobulin (IVIG) is empirically effective because it inhibits bacterial superantigen induced production of proinflammatory cytokines.

Case presentation summary A six-year-old boy presented with a history of fever for 5 days. Based on a positive strep test and typical red rash he was diagnosed with scarlet fever and was under treatment with amoxicillin. His clinical examination revealed bilateral conjunctival infection without exudate, cracked lips, strawberry tongue, injection of pharyngeal mucosa, maculopapular rash and unilateral cervical lymphadenopathy. Investigations showed increased WBC count, ESR=52 mm/hr, CRP=143 mg/L and elevated liver enzymes. The film array test for upper respiratory tract infection was negative. He fulfilled the criteria of KD, so he was started on IVIG and acetylsalicylic acid. He required more than one dose of IVIG in order to demonstrate an effect. On the 13th day

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.