Conclusions: Kids can have a variety of musculoskeletal disorders. We feel that management of rheumatological conditions in kids need to be approached in a multidisciplinary way. Genetic disorders mimicking inflammatory conditions need to be considered all time. In those places particularly where paediatric rheumatologists are not available, involvement of paediatricians may be useful. In terms of PPRD, it is commonly mistaken as juvenile rheumatoid arthritis, however there is no inflammatory process going on in PPRD.

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AB1098

EARLY PROSTHESIS IMPLANTATION IS POSSIBLE IN PATIENTS AFFECTED BY JUVENILE IDIOPATHIC ARTHRITIS, TREATED WITH BIOLOGICS: A MONOCENTRIC EXPERIENCE OF 160 PROSTHESIS FROM THE LAST TWENTY YEARS

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Background: The main reasons for prosthesis implantation in a young patient are post-traumatic osteoarthritis, congenital dysplasia and autoimmune diseases involving joints, like Juvenile Idiopathic Arthritis (JIA). Often, related to particular anatomic conditions and severe grade of deformity, there may be a need for special (custom made or revision) components of prosthesis. Biologic therapy in severe, refractory JIA has permitted to obtain a better control of the disease so as to proceed with prosthesis implantations (hip, knee, ankle).

Objectives: The aim of the study was to present a monocentric experience of a transitional care centre for JIA and the outcome of early prosthesis implantation in patients treated with biologics.

Methods: 160 prosthesis implantation (72 Hip arthroprosthesis, 71 Knee arthroprosthesis and 17 Ankle arthroprosthesis) were performed between 1999 and 2017. It was defined a wash-out period from the biologic therapy depending on the half-life of the medication. The survival of the implant was evaluated for a period of 10 years. We evaluated the different type of implants and it was proposed a radiographic classification for every type of implant.

Results: All patients included in the study were treated with biologics. A long-term analysis of the following ten years of follow-up proved an average survival of 95.5% of the prosthesis and good results in term of function and comfort for the patients. Complications in 2% (two trochanter detachment, two sepsis and one peri-operative haemorrhage).

Conclusions: Prosthesis implantation for JIA patients is a complicated and difficult procedure in comparison with the traditional approach used in patients affected by osteoarthritis. This is related to the management of the biologic therapy, the low quality of the bone, the remarkable stiffness and deformity of the joints. Long-term results were good, even in patients with severe arthritis. There was a drastic reduction of articular pain and an improvement of functionality. Prosthesis implantation in patients with active disease and mild or bad response to the biologics had a worse outcome. The use of not cement-retained implants doesn't influence the long-term survival at ten years, similar to that of the adult patients affected by osteoarthritis.

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AB1099

AN AUDIT ON THE SCREENING GUIDELINES FOR UVEITIS IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS WITHIN THE ROYAL HOSPITAL FOR CHILDREN, GLASGOW

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Background: Juvenile Idiopathic Arthritis (JIA) defines many arthropathies occurring in children which persist for at least 2 weeks. All JIA patients are at risk of developing uveitis, an inflammatory condition of the eye which poses a risk to visual impairment. The British Society of Paediatric and Adolescent Rheumatology outline guidelines for the screening of these patients. Given the time since publication, an audit on the adherence to said guidelines, as well as patient outcomes, was conducted.

Objectives: Our aim was to identify adherence to the screening guidelines within the RHC, Glasgow; and to what extent adherence to these guidelines prevented the occurrence of uveitis. We aimed to identify areas which could be improved within the Glasgow service itself, as well as providing data for the revision of the guidelines.

Methods: We performed a clinical audit of all JIA patients diagnosed between 1st January 2008 and 31st December 2017, analysing the frequency and adherence of appointments, as well as medication use. Data was gathered from patient medical files and collected into a database for analysis.

Results: 97 of 115 JIA patients entered the screening programme. 72 patients had their initial eye screen within the appointed guidelines of 6 weeks, and 13 of the patients were examined under anaesthetic, with a mean time to examination of 3.31 weeks (0–7.14).

15 patients were seen according to the two-monthly guidelines for the first 6 months of diagnosis. Following this 6 month period, it is suggested patients are screened every three to four-months. 463 out of 641 (72.2%) appointments met this guideline.

After stopping immunosuppressive therapy, it is advised to screen at two-monthly intervals. 97 patients were treated with immunosuppressants, with 10 patients stopping whilst still in the screening service. 9 continued to be seen on a three to four-month basis as before, 1 patient was not screened at all, but no patients were screened according to the guidelines.

Conclusions: Adherence to the screening service could be improved, with 75% of patients having had their first screen within the guideline criteria, and 72% seen within the guidelines following the initial 6 months. It seems that improvement mainly needs to be focussed on the methods of appointment rearrangement.

There is believed to be a 6 month high-risk period of developing uveitis following cessation of immunosuppressants, thus increased screening is suggested. This was not adhered to well in the Glasgow service, but there was no increased risk of uveitis development found, suggesting the need for alteration to the guidelines.

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AB1100

EPIDEMIOLOGY AND MANAGEMENT PRACTICES FOR CHILDHOOD-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS: A SURVEY IN LATIN AMERICA

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Background: Two groups have reported data focused on epidemiology, clinical and laboratorial features of childhood-onset systemic lupus erythematosus (cSLE) patients in Latin America (LA): BRAC-SLE (Brazilian Childhood-onset SLE Registry Group) and GLADEL (Grupo Latino Americano De Estudio del Lupus). However, to the best of our knowledge, epidemiology and management of cSLE based on LA Paediatric Rheumatologists (LAPR) were not carried out.

Objectives: Therefore, the objective of the present cross-sectional survey study was to assess LAPR reports of cSLE patients regarding epidemiology, classification criteria, disease activity and other instruments used in clinical practices, laboratory and other exams availability, general supportive care, drugs availability, infections, non-live vaccines, issues observed in adolescents, reproductive health issues and transition-focused program to adult care.

Methods: A cross-sectional study was performed in 288 LAPR based on online survey about cSLE practices, which included 21 countries. All physicians are members of Pan-American League of Association for Rheumatology (PANLAR).

Results: The response rate of web-based survey by LAPR was 170/288 (59%) and the majority worked in University Hospitals (63%). The ACR and/or SLICC classification criteria (99%) and disease activity tools (97%) were almost universally used by LAPR, whereas damage index (70%) and CHAQ (58%) instruments were less frequently used. Laboratory exams, diagnostic imaging and biopsies were generally available (>75%), however low availability for densitometry (66%). Drug access was excellent for the most common prescribed medications (>75%), except for belimumab (11%). Endemic illnesses were reported by LAPR in at least one cSLE patient during the previous year: tuberculosis (16%) and Hansen disease (2%). Emerging mosquito-borne diseases were also reported: dengue (20%), Chikungunya (11%) and Zika (8%). Groups were further divided in two, according to the number of cSLE patients followed by LAPR in the last year: group A (³25 patients) and group B (<25 patients). Frequencies of condom in combination with other contraceptive methods were significantly higher in group A than B (69% vs. 48%, $p=0.01$). The frequencies of reported pregnancy (50% vs. 16%, $p<0.001$) and non-adherence to therapy were significantly higher in group A (100% vs. 93%, $p=0.023$). Alcohol intake (42% vs. 21%, $p=0.004$) and illicit drug use (19% vs. 5%, $p=0.007$) were also reported more frequently by LAPR of group A in at least one cSLE patient.

Conclusions: This first large web-based survey demonstrated an overall excellent access for diagnosis and therapy by LAPR, probably related to their high rate of practices in tertiary care of University Hospitals. Adherence to therapy, pregnancy and substance abuse were identified as major challenges in this population, particularly in larger centres.

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AB1101 THE DEVELOPMENT OF A PALATABLE, STABLE ORAL METHOTREXATE SOLUTION

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Background: Methotrexate is used in the treatment of Rheumatoid Arthritis, Juvenile Idiopathic Arthritis and other conditions such as Acute Lymphoblastic Leukaemia and psoriasis. It can be administered orally or by injection. With oral administration, methotrexate's bitter taste may not be masked, particularly when tablets are crushed to facilitate dosing in paediatrics or patients who have difficulty swallowing tablets.¹ This can lead to long term treatment adherence issues and inaccurate dosing, putting patients at risk of adverse reactions or inadequate efficacy. A palatable oral liquid presentation of methotrexate would facilitate more accurate dosing and potentially improve treatment adherence; however, methotrexate is difficult to formulate as an oral liquid due to taste, solubility and stability challenges. Despite these difficulties, a palatable, stable oral methotrexate solution has been developed.

Objectives: To develop a palatable, stable, oral methotrexate solution, which complies with EU requirements for development of paediatric products,² to aid accurate dosing and treatment adherence.

Methods: During each of two single-dose (10 mg and 2.5 mg) bioequivalence studies of the test 2 mg/ml methotrexate oral solution with licenced tablets, 24 healthy male subjects were asked to comment on the oral solution's taste, indicating whether it was: Bitter, Sour, Salty, Sweet, or No Obvious Taste and they could also leave a remark. In parallel to clinical studies, long term ICH stability studies at ambient conditions (25°C/60%RH) and in-use shelf life studies were conducted.

Results: All subjects in the 10 mg dose study reported the oral solution as sweet tasting. One subject also reported an aftertaste and strange smell. In the 2.5 mg dose study, all subjects except one reported the solution as sweet tasting. The remaining subject reported a 'soothing' taste. One subject reported it was also sour and another reported an aftertaste. Two subjects additionally commented that they liked the taste. Both studies demonstrated bioequivalence and a similar safety profile between the oral solution and tablets. The stability studies illustrated that the oral methotrexate solution utilised in these clinical studies was stable at ambient conditions for up to 20 months, including a 3 months in-use period. The oral solution has recently been granted a European Union marketing authorisation and is the first methotrexate oral solution to be authorised for treatment of polyarthritic Juvenile Idiopathic Arthritis in Europe.

Conclusions: A 2 mg/ml oral methotrexate solution, developed to improve treatment adherence and dose accuracy, is reported to have a palatable, sweet taste and can be stored long term at ambient conditions with a 3 months in-use period.

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AB1102 KAWASAKI DISEASE AND GIANT ANEURYSM IN MEXICAN CHILDREN: EVOLUTION AND CLINICAL CHARACTERISTICS: A 5-YEAR EXPERIENCE

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Background: Kawasaki disease (KD) is an acute, self-limited, systemic vasculitis, predominantly involving medium-sized arteries. It mainly affects children younger than five years and it is the leading cause of acquired heart disease in children in developed countries. Of unknown pathogenesis, KD severe complication is the occurrence of coronary artery lesions. Without early treatment, there is a 15% to 25% incidence of coronary artery lesions. Management with intravenous immunoglobulin (IVIG), combined with aspirin, effectively decrease the incidence of this lesions to a 4%. The long-term prognosis is determined by the initial and current level of coronary artery involvement. Methods to predict which children are at higher risk for coronary aneurysms have been sought to determine prognosis and select patients for more rigorous treatment and follow-up.

Objectives: To describe the clinical presentation and evolution in addition to laboratory findings in Mexican paediatric population who developed giant aneurysms diagnosed with KD during the past 5 years. By identifying mayor risk factors in our population, an effective score could be used to select children for evaluation of additional therapies to prevent coronary artery aneurysms that occur despite treatment with IVIG.

Methods: Retrospective cohort study of the Children's Hospital of Mexico Federico Gomez, last 5 years. We reviewed the data form the clinical archives of the patients who developed giant aneurysms after the diagnosis of KD from 2011 to 2016. A total of 84 patients with KD, 7% developed giant aneurysms. The variables analysed, apart from the typical clinical and laboratory findings of KD, include size and Z score of the aneurysms, involution through follow up, cardiac morbidity and mortality, and treatment strategy.

Results: Results: The mean age of patients at diagnostic was 17 months, and 84% were males. Only 33% of the patients developed complete KD, while 66% were diagnosed as incomplete. All patients presented with a positive Harada score. IVIG was administer in 83% of the patients, and a second dose was needed in 33%. Infliximab was used in 33% of the patients. One patient died due to cardiogenic shock. Results from echocardiography in the follow-up show that 33% of the patients have evolved to even larger aneurysms and 50% present no changes. Of the patients with a longer follow-up, 4 years after diagnostic, 33% have developed arrhythmias and 16% myocardial infarction. All are at high risk of sudden death.

Conclusions: The late diagnosis is the characteristic present in all patients which developed giant aneurysms, making imperative to identify clinical and laboratory findings that will help identify KD in Mexican paediatric population to avoid cardiac complications.

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