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Conclusions: MG was observed in patients with various rheumatic disorders, with SS being the most common type. The presence of MG might associated with higher disease activity. The development of haematological neoplasias including MM and lymphoma was seen in this setting. Therefore, we recommend the screening for MG and close monitoring for potential malignant transformation in patients with rheumatic diseases as needed.

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AB1166

THE ASSOCIATION OF THE EARLY ONSET OF REMITTING SERONEGATIVE SYMMETRICAL SYNOVITIS WITH PITTING OEDEMA (RS3PE) SYNDROME WITH DIPEPTIDYL PEPTIDASE-4 (DPP4) INHIBITOR

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Background: Remitting seronegative symmetrical synovitis with pitting oedema (RS3PE) syndrome is a rare inflammatory arthritis, characterised by absence of rheumatoid factor, symmetrical distal synovitis, pitting oedema of the hands and feet.

In recent years the use of dipeptidyl peptidase-4 (DPP4) inhibitor has increased and some reports have described the association of RS3PE syndrome with DPP4 inhibitor

Objectives:: We have tried to investigate the association of RS3PE syndrome with DPP4 inhibitor in our hospital.

Methods: In Japan DPP4 inhibitor was released in December 2009, so we retrospectively analysed background, treatment and clinical course of 25 patients with RS3PE syndrome diagnosed between December 2009 and December 2016 in our hospital. We divided them in two groups according to DPP4 inhibitor prescription and compared two groups.

Results: : Our cases included 18 males and 7 females, and the mean age of RS3PE syndrome onset was 76 years old. The mean follow-up period was 32.5 months. Six patients had diabetes mellitus and DPP4 inhibitor was prescribed in five of six patients (83.3%). (sitagliptin 3 cases, teneligilptin 1 case, alogliptin 1 case). The duration of RS3PE syndrome onset after DPP4 inhibitor prescription was mean 22.9 months, and two cases developed within a half year, two cases after two years.

Compared with non DPP4 inhibitor group, the mean age of RS3PE syndrome onset was significantly low (70 vs 78.5, p=0.023), and HbA1c (NGSP) was high (7.3% vs 6.02%, p=0.00022) in DPP4 inhibitor group.

The occurrence of flare was four cases in non DPP4 inhibitor group and zero in DPP4 inhibitor group, but was not statistically different (p=0.275). Other clinical features were not significantly different.

Abstract AB1166 - Table 1. Clinical characteristics of the patients

Characteristics	DPP-4 inhibitor (N=5)	non DPP-4 inhibitor (N=20)	P value
Mean age - yr	70 (±7.91)	78.5 (±6.61)	0.023
Male sex - no.(%)	5 (100%)	13 (65%)	0.119
CRP, mg/dl	$7.97 (\pm 5.08)$	$7.45 (\pm 5.86)$	0.86
HbA1c (NGSP), %	$7.3 (\pm 0.68)$	$6.02 (\pm 0.57)$	0.00022
Medications			
MTX			
Patients, no.(%)	2 (40%)	9 (45%)	
Dose, mg/week	8 (±0)	7.33 (±1)	0.081
Oral prednisolone			
Patients, no.(%)	5 (100%)	18 (90%)	
Dose, mg/day	$12(\pm 4.47)$	$10.8 (\pm 4.62)$	0.625
Malignancies - no.(%)	0 (0%)	1 (5%)	0.61
Flare - no.(%)	0 (0%)	4 (20%)	0.275

Conclusions: : DPP4 inhibitor group was significantly younger than non DPP4 inhibitor group, and the possibility that DPP4 inhibitor contributed to the early onset of RS3PE syndrome was suggested.

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Diagnostics and imaging procedures

AB1167

METHOD COMPARISON OF AESKUSLIDES ANCA FOR THE DIAGNOSIS OF ANCA-ASSOCIATED VASCULITIS

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Background: AESKUSLIDES ANCA is an indirect immunofluorescence assay used to detect anti-neutrophil cytoplasmic autoantibodies (ANCA) in human serum. This *in vitro* diagnostic assay is used as an aid for the diagnosis of ANCA-associated vasculitis (AAV) in conjunction with other clinical and laboratory findings.

Methods: A method comparison of ethanol and formalin fixed granulocytes was carried out between AESKUSLIDES ANCA (AESKU. Diagnostics) and the NOVA Lite ANCA of INOVA. 507 clinical serum samples (comprising 135 serum samples from patients with AAV and 375 samples from patients with other diseases) were analysed by standard IFA protocols. Results were obtained by manual processing and reading.

Results: In this cohort, AESKUSLIDES ANCA Ethanol slides show higher sensitivities (48.5% vs. 36.4%) and specificities (69.3% vs. 55.2%) compared to INOVA. AESKUSLIDES ANCA Formalin slides show higher sensitivities (50.0% vs. 37.9%) and similar specificities (90.7% vs. 91.5%) compared to INOVA.

Conclusions: AESKUSLIDES ANCA Ethanol showed higher diagnostic sensitivity (48.5%) and specificity (69.3%) compared to the predicate assay NOVA Lite provided by INOVA (36.4%, 55.2%). This is due to the fact, that AESKU assay detects more positives in the AAV cohort, and less positives in the other disease groups. AESKUSLIDES ANCA Formalin showed a diagnostic sensitivity (50.0%) compared to the predicate assay NOVA Lite provided by INOVA (37.9%). However, the diagnostic sensitivity was comparable between the two (90.7% vs 91.5%).

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AB1168

IS MY CLINICAL EXAMINATION ADEQUATE TO EVALUATE DISEASE ACTIVITY IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS (JIA)? A COMPARATIVE ASSESSMENT OF CLINICAL AND ULTRASOUND (US) EXAMINATION OF 40 KNEES AND ANKLES IN 10 CHILDREN WITH JIA

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Background: JIA is the commonest rheumatologic disease of childhood with a quoted prevalence of 1:1000. Assessment of children with JIA includes:Clinical, laboratory and more recently US evaluation of joints. Rapid attainment of inactive disease is critical for a good long term outcome. There is a debate in the rheumatology community about added advantage of US examination over clinical assessment of joints. This study was done to compare clinical versus US evaluation of knees and ankles in children with JIA.

Objectives: 1. To clinically examine and scan knees and ankles of 10 children with JIA

- 2. To determine sensitivity and specificity of clinical examination of knees and ankles vis a vis US scan findings
- 3. To compare results of knee and ankle examination both clinical and US

Methods: 1.10 consecutive children with JIA were evaluated for active arthritis of knees and ankles and documented on a pre designed proforma.

2. Children were then examined with US on same day by same observer and joint effusion and or synovitis was captured using an E9/S7 GE machine with a linear transducer 6–15 MHz.

Results: 10 children aged 6–16 years, (6F and 4M) who attended the out-patient paediatric rheumatology clinic at our hospital with JIA were clinically evaluated and US examination performed on same day by same examiner with prior consent. Using the standard ESSR protocols, US knee and ankle joints were examined in longitudinal view and if any effusion or synovitis detected was confirmed on transverse view. The presence of grey scale synovial proliferation or anechoic effusion was taken as a positive US finding.

 $\label{lem:Knee-Sensitivity} Knee-Sensitivity of clinical examination-100\%, specificity-91.7\%.$

Ankles-Clinically 8 had swollen ankle, On US only 5 children had swollen ankle (tibio talar TT) joint. 3 who had a swollen ankle clinically had no synovial hypertrophy or effusion in the TT joint but had tenosynovitis(TS) of adjacent tendons: 1 each has a TS of the Extensor Digitorum Longus, Tibialis Anterior, Tibialis Posterior. Sensitivity-60% and specificity-66.7%.