AB0518 - JUVENILE SYSTEMIC LUPUS ERYTHEMATOSUS RELATED PANCREATITIS: AN UNCOMMON MANIFESTATION OF A COMMON DISEASE

Anjani Gummadi, Ankita Singh, Rakesh Kumar, Johnson Nameirakpam, Pandiarajan Vignesh, Deepti Suri, Anju Gupta, Ankur Jindal, Amit Rawat, Surjit Singh. *Post Graduate Institute of Medical Education and Research, Chandigarh, Pediatrics, Advanced Pediatric centre, Chandigarh, India*

Background: Pancreatitis is a rare but potentially life-threatening complication of juvenile systemic lupus erythematosus (JSE).

Objectives: We report 3 children with SLE who presented with acute pancreatitis.

Methods: We have reviewed the clinical records of 140 children with SLE between period of 1993-2018. Three of them present with acute pancreatitis.

Results: Case 1- 12-year-girl presented with fever of 1 month and alopecia. Examination revealed pedal oedema, periorbital puffiness, generalised lymphadenopathy, large joint arthritis and mild hepatomegaly. Investigations were consistent with lupus. Renal biopsy revealed Class 3 lupus nephritis and initiated on intravenous methylprednisolone. Two days after beginning her medication, she developed severe epigastric pain and vomiting which did not respond to antacids and analgesic. Serum amylase and lipase were elevated. Clinical possibilities included steroid induced pancreatitis and lupus pancreatitis. Intravenous methylprednisolone was continued following which she showed a dramatic improvement. **Case 2-** A 6-year-old presented with pain abdomen and vomiting. Physical examination showed epigastric tenderness. Investigations showed elevated amylase levels. Computerised tomography (CT) abdomen revealed acute necrotising pancreatitis. A ultrasound abdomen revealed a pancreatic pseudocyst. He had a second episode of acute pancreatitis along with anasarca after 3 months. In follow-up, he presented with anasarca. Investigation were consistent with lupus. Following the initiation of steroids, he improved and there has been no recurrence of pancreatitis over the next 4 years. **Case 3-** 9-year-girl presented with generalised rash and alopecia for 5 months. She also had pain abdomen for last 2 months. Investigations showed elevated amylase and ultrasound abdomen revealed acute pancreatitis. She had undergone a laparotomy elsewhere. Examination showed generalised pigmented rash, periorbital edema, alopecia, periorbital puffiness, hard palate ulcer and surgical scar on the abdomen. Urinalysis showed nephrotic range proteinuria. Serum amylase levels were elevated. Ultrasound abdomen revealed a pancreatic pseudocyst. Further investigations were suggestive of lupus. Workup for APLA revealed positive lupus anticoagulant. She was initiated on oral prednisolone and was given pulses of intravenous cyclophosphamide. There has been no recurrence of pancreatitis over 12-years follow-up.

Investigation	Case 1	Case 2	Case 3
Haemoglobin (g/L)	92g/L	96 g/L	80 g/L
White cell counts	7.7 X	7.8 X 10 ⁶ /L	7.5 X
Lymphocyte count	10 ⁶ /L	1.9 X 10 ⁶ /L	10 ⁶ /L
	2.15x		1.95X10 ⁶ /L
Platelets	130x10 ⁹ /L	150 x10 ⁹ /L	420 x10 ⁹ /L
Urine routine	10-12	Few RBC, 3 + albumin	No RBC,
Urine protein (mg/m ² /hour)	RBC, 3 + albumin	82 mg/m ² /hr	3+ albumin
	-		40 mg/m ² /hr
C3 (Normal 50-150 mg/dL)	23.4mg/dl	129 mg/dL	34 mg/dl
C4 (Normal 20-50 mg/dL)	2.98mg/dl	37mg/dL	10 mg/dl
ANA	4+ diffuse	3 +	3+ diffuse
Anti dsDNA (N: <60 IU/mL)	890	<60	123
Antiphospholipid antibodies: a)	Negative	Negative	Positive
Lupus anticoagulant b)	Negative	Negative	Negative
Anticardiolipin antibody (IgG and IgM) c)	Negative	Negative	negative
Antibody (IgG & IgM)			
Skin biopsy	Not done	Positivity of lupus band test with high positive IgG, IgA, IgM and C3 in dermal vessels	Lupus band test -positive
Renal biopsy	Class 3 lupus nephritis	IgG, Ig A, Ig M positivity in the mesangium as well as capillary loops and C3 in small sized blood vessels	Class 4 lupus nephritis
Serum amylase (< 100 U/L)	238 U/L	400 U/L	290 U/L
Serum lipase (< 60 U/L)	231U/L	Not done	Not done

Conclusion: Pancreatitis can at times, be the presentation of childhood lupus and requires prompt and aggressive management.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.7507

AB0519 VITAMIN D CUT-OFF POINTS RELATED WITH CLINICAL FEATURES IN PATIENTSWITH ACTIVE LUPUS OR LUPUS NEPHRITIS

Renato Guzman¹, Luis Gabriel Piñeros², Maria Camila Mejia², Anibal Teheran², Luis Miguel Pombo², Vanessa Cadavid², COMPLEXUS: GIVFTA. ¹Fundación Universitaria Juan N. Corpas, Research center, Bogota, Colombia; ²Fundación Universitaria Juan N. Corpas, Research center, Bogota, Colombia

Background: Vitamin D (25OHD) has immunomodulatory properties that can play a major role in patients with active lupus or lupus nephritis. His immunomodulatory function could be influenced by demographic factors, comorbidities (Charlson score), bone supplements, and other features.

Objectives: We explored the association between the best 25OHD cut-off points and specific clinical features that were present in patients with active lupus or lupus nephritis.

Methods: A retrospective descriptive research using clinical registers of patients diagnosed with systemic erythematosus lupus, attended in two rheumatology clinics was performed. A decisions tree model was used to identify the best cut-off points of 25OHD [ng/mL] and clinical features associated with active lupus (SLEDAI-2k >6) or lupus nephritis.

Results: We identified 81 patients, median age 41 years, women 91.3%. Active lupus and lupus nephritis were present in 69.1% and 29.6%, respectively. Median 25OHD was 26.49, without a difference at comparing with active lupus patients 24.85, but lower in lupus nephritis patients 21.50 (p: 0.015). Lupus nephritis was absent in patients with 25OHD cut-off points >38.8 (alone) or ≤38.8 if they were older than >57 years. Active lupus was always present in patients ≤44 years with 1. High comorbidity or 2. Low comorbidity plus cut-off point 25OHD >35; in >44 years, both a euthyroid state and the absence of bone supplements were present in patients with active lupus.

Conclusion: Exist a strong relationship between vitamin D levels and LES activity.

REFERENCES

- [1] American College of Rheumatology. Guidelines for referral and management of systemic lupus erythematosus in adults. *Arthritis Rheum.* 1999 Sep;42(9):1785-96
- [2] Simioni J, Heimovski F, Skare T. On lupus, vitamin D and leukopenia. *2016;56(3):206-211.*
- [3] Guzman R.A, Piñeros L.G, Theran A, Flechas J, Mejia M. AB0795 Hypovitaminosis D and Calcium Intake of Adult Population in Bogota (DICAVIDT). *Ann Rheum Dis* 2016;75:1175-. 1176.

Acknowledgement: To Fundación Universitaria Juan N. Corpas

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.7662

AB0520 A COMPARISON OF SHEAR WAVE ELASTOGRAPHIC FINDING OF SUBMANDIBULAR GLANDS IN PATIENTS WITH EARLY-STAGE AND NON-SJÖGREN'S SYNDROME

Naoaki Hashimoto¹, Shozo Uchiyama², Masayasu Kitano³, Takashi Nakazawa⁴, Tsuyoshi Iwasaki⁵, Takenori Hashimoto¹. ¹Hashimoto Rheumatology Clinic, Osaka, Japan; ²Kansai Medical University, Temmabashi General Clinic, Osaka, Japan; ³Hyogo College of Medicine, Division of Rheumatology, Department of Internal Medicine, Nishinomiya, Japan; ⁴Osaka Saiseikai Nakatsu Hospital, Department of Rheumatology, Osaka, Japan; ⁵Hyogo University of Health Sciences, Department of Pharmacy, Kobe, Japan

Background: Salivary gland (SG) ultrasonography proved valuable for assessing SG involvement in Sjögren's syndrome (SS) and seemed to exhibit good diagnostic properties. We have reported that the submandibular gland ultrasonography (SGUS) is a useful noninvasive and inexpensive procedure for the evaluation of the structural changes of SG in SS (ISSS 2002, EULAR 2009, EULAR 2012, EULAR 2015). However, our previously study demonstrated that although SGUS findings were useful for the diagnosis of SS with low salivary flow they were not for early stage SS with normal salivary flow (EULAR 2016). Recently, we reported that the tissue elasticity was decreased due to structural changes in the SG at the advanced stage of the disease and that the shear wave