site preceded distant or systemic manifestations. Abnormal blood tests were common. Localised inflammatory nodules and panniculitis in 88.88% evolved into a variety of disorders, viz., primary biliary cirrhosis, Sjögren's syndrome, sarcoidosis, human adjuvant disease, vasculitis, inflammatory bowel syndrome and inflammatory polyradiculopathy. 11.11% cases presented primarily with systemic autoimmune disorders.

Conclusion: Biomaterials and prostheses can provoke late-onset systemic autoimmune disorders fulfilling ASIA criteria, or present primarily local/regional inflammatory reactions that may eventually evolve into systemic autoimmune and/or granulomatous disorders which fall under ASIA

REFERENCES

- [1] Hanke CW, Rohrich RJ, Busso M, Carruthers A, Carruthers J, Fagien S, et al. Facial soft-tissue fillers: assessing the state of the science conference proceedings report. *J Am Acad Dermatol*. 2011;64(4 Suppl):S53-65.
- [2] Ellis DA, Makdessian AS, Brown DJ. Survey of future injectables. *Facial Plast Surg Clin North Am*. 2001;9:405-11.
- [3] American Society of Plastic Surgery. Statistics of 2010, http://www.surgery.org/site/default/stats2010_1.pdf (2010, Accessed 01 Aug 2011).

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.3234

AB1075 IDIOPATHIC ORBITAL PSEUDOTUMOUR: A CASE SERIES AND LITERATURE REVIEW

Edna Amaya Cabrera, Sergio Cerpa-Cruz, Veronica Gonzalez-Diaz, Gloria Martinez-Bonilla, Sergio Gutierrez-Ureña, Marisol Iniguez Soto. *Hopital Civil Fray Antonio Alcalde, Reumatologia, Mexico, Mexico*

Background: Idiopathic orbital pseudotumour (IOP), also known as idiopathic orbital inflammatory syndrome is a benign, non-infective, inflammatory condition of the orbit without identifiable local or systemic causes. After Grave's disease and lymphoproliferative disorders, orbital pseudotumour is the 3rd most common ophthalmologic disease of the orbit and account for approximately 8-11% of all the orbital tumors. Pathogenesis of orbital pseudotumour remains elusive but several lines of evidence point to immune-mediated processes as the likely underlying ocular mechanism. The etiology of orbital pseudotumour is unknown, but infection, autoimmune disorder, and aberrant wound healings have been put forward as possibilities. The ocular manifestations of orbital pseudotumour may include periorbital edema, erythema, proptosis, ptosis, diplopia and pain with eye movements.

Objectives: Describe clinical and demographic characteristics, most frequent diagnoses, immunological serology and treatments in patients with Orbital Pseudotumour.

Methods: We performed a retrospective cohort study of adult and pediatric patients with orbital pseudotumour diagnosis referred to the Department of Rheumatology of the Fray Antonio Alcalde Civil Hospital in Guadalajara Jalisco, Mexico, from 2012-2018. We collected data that included demographic data of the patient, symptoms, laboratory data that included antibodies, management plans and results.

Results: A total of 20 patients diagnosed with orbital pseudotumour, with a mean age of 42±18.5 years, 3 pediatric patients and 65% women. Clinical manifestations were: 90% unilateral, 90% lacrimal gland involvement, 75% ptosis/proptosis, 40% conjunctival hyperemia, 35% ocular pain, 20% decreased visual acuity, 15% headache and no optic nerve involvement. The findings were similar between adults and children.

The most common diagnoses were: 40% idiopathic, 10% orbital cellulitis, 10% granulomatosis with polyangiitis and 5% each of the following: systemic lupus erythematosus, Sjögren's syndrome, dacryoadenitis and myositis due to IgG4, Kimura's disease, Mikulicz, meningioma and cavernous sinus aneurysm.

All patients underwent excisional biopsy, and the histopathological report showed the following findings: 40% non-specific chronic inflammation, 30% non-specific chronic dacryoadenitis, 5% granulomatous inflammation/vasculitis, 10% chronic sclerosing inflammation-IgG4 and 15% others.

Only 9 of the 20 patients underwent immunological serology, finding positivity in: 15% for c-ANCA, 10% PR3, 5% p-ANCA, 10% MPO, 5% ANAs and 10% elevated blood levels of IgG4.

Regarding treatment, 100% received glucocorticoids, and received immunomodulatory therapy: 20% received azathioprine, 5% mycophenolate mofetil, 20% methotrexate, 15% cyclophosphamide IV, 15% rituximab and 25% received no other medication.

Conclusion: The orbital pseudotumour might be the first manifestation of an autoimmune or autoinflammatory disease, the early and correct diagnosis is necessary to avoid permanent sequelae.

REFERENCES

- [1] Yuen SJ, et al. Idiopathic orbital Inflammation: Ocular mechanism and clinicopathology. *Ophthalmol Clin North Am* 2002;15:121-6.
- [2] Grouteau E, et al. Acute orbital myositis and idiopathic inflammatory pseudotumor in children: cases. *Arch Pediatr* 1998;5:153-158.
- [3] Chaudhry IA, et al. Orbital pseudotumor: Distinct diagnostic features and management. *Middle East Afr J Ophthalmol* 2008;15:17-27

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.4453

AB1076 TREATMENT REVIEW OF ADULT-ONSET STILL'S DISEASE IN A TERTIARY HOSPITAL

Maria Dolores Arcila Duran, Clara Aguilera Cros, Lara Mendez, Isabel Madroñal García, Marina Gomez Vargas, Alberto Ruiz Román, Esteban Rubio Romero, Juan Povedano Gomez. *Hospital Universitario Virgen del Rocío, Sevilla, Spain*

Background: Adult-onset Still's disease (AOSD) is a rare systemic inflammatory disorder of unknown aetiology, and approximately 60% or 70% of the patients can develop a chronic polyphasic form of the disease or a chronic polyarthritis. Due to the rarity of this disease, the treatment of AOSD is not based on a controlled study, but in the experience based on real cases.

Objectives: Describe the different treatments employed in a patient cohort diagnosed with adult-onset Still's disease (AOSD).

Methods: Descriptive, retrospective study of patients treated in our Hospital (2008-2018), diagnosed with AOSD according to the classification criteria of Yamaguchi. The data were achieved by the review of the clinical records.

Results: Twenty-four patients (15 women), average age of 41±13 years, were included. Two women, with presentation on the symptoms at 8 and 3 years old, first diagnosed with systemic juvenile idiopathic arthritis (S-JIA), and then with AOSD.

The initial treatment was based in non-steroidal anti-inflammatory drugs (96%) and glucocorticoids (0.5-1 mg/kg/day) (96%) for symptom control, with the necessity to add oral or subcutaneous methotrexate at a dose of 15 mg per week in 13 patients (54%).

Only two patients used acetyl salicylic acid as initial treatment, with no improvement.

Previous treatment		Current treatment	
Drug	n (%)	Drug	n (%)
NSAIDs	23 (96%)	NSAIDs	2 (8%)
Glucocorticoids	23 (96%)	Glucocorticoids	3 (12%)
DMARDs	15 (62%)	DMARDs	3 (12%)
• Methotrexate	13 (86%)	• Methotrexate	2 (8%)
• Leflunomide	5 (33%)	• Hydroxychloroquine	1 (4%)
• Hydroxychloroquine	8 (53%)		
• Sulfasalazine	2 (13%)		
Biological treatments	5 (21%)	Biological treatments	3 (12%)
• Etanercept	3 (60%)	• Sarilumab	1 (33%)
• Adalimumab	1 (20%)		
• Infliximab	4 (80%)	• Tofacitinib	2 (66%)
• Tocilizumab	2 (40%)		
• Sarilumab	1 (20%)		
• Rituximab	2 (40%)		
• Baricitinib	2 (40%)		
• Tofacitinib	1 (20%)		
Immunosuppressores	4 (17%)	DMARDs + Biological treatments	0
• Azathioprine	2 (50%)		
• Mycophenolate Mofetil	1 (25%)		
• Cyclophosphamide	1 (25%)		
		Without treatment	11 (46%)

Five patients used also biological treatments with a standard doses, with the necessity of various drugs to achieve their clinical remission. Nowadays, all patients have their clinical remission. Patient 1: Infliximab, rituximab, tocilizumab and baricitinib. Patient 2: Etanercept and rituximab. Patient 3: Etanercept, adalimumab and infliximab. Patient 4: Etanercept, infliximab and tofacitinib. Patient 5: Infliximab, tocilizumab, baricitinib and sarilumab (great response to a anti-IL6, tocilizumab were removed because of a local reaction in the injection's spot, although it had a good response too). Two patients with clinical remission with JAK-kinase

inhibitors (baricitinib and tofacitinib, respectively), one patients with anti-TNF (infliximab) and another one with anti-CD20 (rituximab).

Conclusion: In general, our results match with what it is published in the literature.

For the treatment of AOSD has been used high doses of ASA (4g/day) or NSAID. However, the required doses (with their respective adverse effects), its limited responses and the frequent relapses after its suppression make difficult to maintain it. Nowadays, the systemic glucocorticoids are our first choice (0.5 to 1 mg/kg/day). A high average of our patients have a positive response with it, but in a 54% of the cases were necessary to add methotrexate or others DMARDs because of a partial response with steroids.

In the physiopathology of the AOSD there is an increase of pro-inflammatory cytokines, as the tumor necrosis factor, IL-1 e IL-6. The use of therapies that inhibit these molecules (anti-TNF, anakinra or canakinumab as anti-IL-1 or tocilizumab or sarilumab as anti IL-6) is being a progress. The inhibitors of IL-1 can be more efficient for systemic manifestations, while the inhibitors of IL-6 are for articular and systemic affectionation. The TNF inhibitors should being used for the articular affectionation only. In our patient cohort there is no patient with anti-IL1, a patient in clinical remission with anti-TNF and another one with anti-IL-6. Prospective studies with a higher number of patients is necessary to define better the AOSD treatment.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.4904

AB1077

ANTI-IL6-RECEPTOR TOCILIZUMAB IN GRAVES' ORBITOPATHY. MULTICENTER STUDY OF 46 PATIENTS IN CLINICAL PRACTICE

Belén Atienza-Mateo¹, José Luis Martín-Varillas¹, Vanesa Calvo-Río¹, Rosalía Demetrio-Pablo¹, Elia Valls-Pascual², Beatriz Valls-Espinosa², Olga Maiz-Alonso³, Ana Blanco³, Ignacio Torre-Salaberri⁴, Verónica Rodríguez-Mendez⁴, Ángel García-Aparicio⁵, Raúl Veroz González⁶, Vega Jovani⁷, Diana Peiteado⁸, Margarita Sanchez Orgaz⁸, Santos Castañeda⁹, Eva Tomero⁹, J Francisco. Toyos Sáenz de Miera¹⁰, Valvanera Pinillos¹¹, Elena Aurrecoechea¹², Ángel Mora¹², Arantxa Conesa¹³, Manuel Fernández¹⁴, J. Antonio Troyano¹⁵, Iñigo González-Mazón¹⁶, Lara Sánchez Bilbao¹⁶, D. Prieto-Peña¹⁶, Monica Calderón-Goercke¹⁶, Miguel Á. González-Gay¹, Ricardo Blanco¹. ¹Hospital Universitario Marqués de Valdecilla. IDIVAL., Rheumatology and Ophthalmology, Santander, Spain; ²Hospital Pese, Rheumatology, Valencia, Spain; ³Hospital Universitario de Donostia, Rheumatology and Ophthalmology, San Sebastián, Spain; ⁴Hospital Universitario de Basurto, Rheumatology and Ophthalmology, Bilbao, Spain; ⁵Hospital Virgen de la Salud, Rheumatology, Toledo, Spain; ⁶Hospital de Mérida, Rheumatology, Mérida, Spain; ⁷Hospital General de Alicante, Rheumatology, Alicante, Spain; ⁸Hospital Universitario La Paz, Rheumatology and Ophthalmology, Madrid, Spain; ⁹Hospital de La Princesa, Rheumatology, Madrid, Spain; ¹⁰Hospital Universitario Virgen Macarena, Rheumatology, Sevilla, Spain; ¹¹Hospital San Pedro, Rheumatology, Logroño, Spain; ¹²Hospital Sierrallana, Rheumatology and Ophthalmology, Torrelavega, Spain; ¹³Hospital Clínico Universitario de Valencia, Rheumatology, Valencia, Spain; ¹⁴Hospital Universitario de Guadalajara, Rheumatology, Guadalajara, Spain; ¹⁵Hospital Universitario Clínico San Carlos, Rheumatology, Madrid, Spain; ¹⁶Hospital Universitario Marqués de Valdecilla. IDIVAL., Rheumatology and Ophthalmology, Santander, Spain

Background: Graves' orbitopathy (GO) is the most common and important extrathyroidal manifestation of Graves' disease. Corticosteroids and conventional immunosuppressors are not always effective or well tolerated. The IL-6 receptor antibody tocilizumab (TCZ) has demonstrated efficacy in the treatment of this pathology.

Objectives: To assess the efficacy of TCZ in refractory thyroid associated orbitopathy (TAO) due to Grave's disease.

Methods: Multicenter study of 46 patients with TAO refractory to conventional immunosuppressive therapy.

Results: We studied 46 patients (85 eyes) (37 women/9 men); mean age at diagnosis 49.2±11.8 years. Besides oral corticosteroids, before the onset of TCZ patients had been treated with pulses of iv methylprednisolone (42), radioactive iodine (4), methotrexate (2) and other drugs (selenium in 11 cases, methimazole in 8, leflunomide in 1 and azathioprine in 1). 7 patients underwent ocular urgent decompressive surgery.

According to the classification of severity of the EUGOGO group (European Group on Graves' Orbitopathy) using the clinical activity score (CAS), before TCZ onset patients whose data were available had severe (27 eyes) or moderate (34 eyes) disease. Moreover, patients presented exophthalmos (53 eyes), strabismus (37 eyes), muscle fibrosis (38 eyes) and dysthyroid optic neuropathy (10 eyes).

TCZ was used in monotherapy (43) or combined with methotrexate (2) or azathioprine (1) at 8 mg/kg/iv/4 w (41) or 162 mg/sc/w (5). TCZ yielded

rapid and maintained improvement in all ocular parameters as shown in Figures.

FIGURES 1,2,3. Improvement of ocular parameters with TCZ therapy. Data are expressed as mean or median.

Abbreviation: CAS= clinical activity score (0/7 at baseline, 0/10 in the rest of time measures).

Figure 1

After a mean of 7.42±6.41 months using TCZ and a mean follow-up of 16.47±11.99 months, all patients experienced ocular improvement, with TCZ withdrawal in 28 cases due to complete remission (10), improvement (12) or stability of ocular inflammation (3), inefficacy (2) and total thyroidectomy (1). Only 5 relevant adverse effects were observed (neutropenia, external otitis, otitis media, costal osteitis and gingival hyperplasia, 1 each).

Conclusion: TCZ appears to be a useful and secure option in GO treatment.

REFERENCES

- [1] Bartalena L, et al. Consensus statement of the European group on Graves' orbitopathy (EUGOGO) on management of Graves' orbitopathy. *Thyroid*. 2008; 18 (3):333-346.
- [2] Russell DJ, et al. Tocilizumab as a steroid sparing agent for the treatment of Graves' orbitopathy. *Am J Ophthalmol Case Rep*. 2017 Jul 8;7:146-148.

Disclosure of Interests: Belén Atienza-Mateo: None declared, José Luis Martín-Varillas: None declared, Vanesa Calvo-Río: None declared, Rosalía Demetrio-Pablo: None declared, Elia Valls-Pascual: None declared, Beatriz Valls-Espinosa: None declared, Olga Maiz-Alonso: None declared, Ignacio Torre-Salaberri: None declared, Verónica Rodríguez-Mendez: None declared, Ángel García-Aparicio: None declared, Raúl Veroz González: None declared, Vega Jovani: None declared, Diana Peiteado: None declared, Margarita Sanchez Orgaz: None declared, Santos Castañeda: None declared, Eva Tomero: None declared, Francisco J. Toyos Sáenz de Miera: None declared, Valvanera Pinillos: None declared, Elena Aurrecoechea: None declared, Ángel Mora: None declared, Arantxa Conesa: None declared, Manuel Fernández: None declared, J. Antonio Troyano: None declared, Iñigo González-Mazón: None declared, Lara Sánchez Bilbao: None declared, D. Prieto-Peña: None declared, Monica Calderón-Goercke: None declared, Miguel Á. González-Gay: None declared, Ricardo Blanco: None declared

DOI: 10.1136/annrheumdis-2019-eular.1628

AB1078

RED CELL DISTRIBUTION WIDTH (RDW) – A NEW POSSIBLE DISEASE ACTIVITY PREDICTOR IN RELAPSING POLYCHONDRIITIS

Bianca Balan^{1,1}, Roxana Ioana Gutu¹, Felicia Mustăţea¹, Ioana Felea¹, Ileana Filipescu¹, Cristina Pamfil¹, Liliana Bene², Simona Rednic¹, Laura Damian¹. ¹County Emergency Hospital Cluj-Napoca, Rheumatology, Cluj-Napoca, Cluj, Romania; ²County Emergency Hospital Cluj-Napoca, Immunology, Cluj-Napoca, Cluj, Romania

Background: Relapsing polychondritis (RP) is a rare condition defined by recurrent inflammation of cartilaginous tissue and systemic manifestations. Biomarkers for RP diagnosis and assessment of disease activity, damage and prognostic in clinical practice are currently lacking. Red blood cell distribution width (RDW) is an index of erythrocyte size variation depicting