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Background: Anterior uveitis (AU) is the most common pattern of uveitis, that might lead to important ocular complications including blindness. Immunomodulatory drugs have been used in order to prevent recurrences of uveitis. Nevertheless, it is not clear which drug could be preferred in each patient.

Objectives: To generate recommendations on the use of immunomodulators in adult patients with non-infectious, non-neoplastic anterior uveitis (AU) based on best evidence and experience.

Methods: Delphi methodology was followed. A multidisciplinary panel of 5 experts (2 ophthalmologists, one immunologist, one rheumatologist, one internist) was established, who, in the first nominal group meeting, defined the scope, users, and chapters of the document. A systematic literature review was performed to assess the efficacy and safety of immunomodulators in patients with non-infectious, non-neoplastic AU. All of the exposed above was discussed in a second nominal group meeting and 33 recommendations were generated. Recommendations agreement grade was tested also in 25 additional experts. Recommendations were voted from 1 (total disagreement) to 10 (total agreement). We defined agreement if at least 70% voted ≥ 7 . The level of evidence and grade or recommendation was assessed using the Oxford Centre for Evidence-based Medicine Levels of Evidence.

Results: The 33 recommendations were accepted. They include specific recommendations on patients with non-infectious, non-neoplastic UA, as well as different treatment lines. Methotrexate (MTX) or Sulfasalazine were recommended as a first line drugs in refractory cases to topic treatments in patients with AU and spondyloarthritis, inflammatory bowel disease, psoriasis, idiopathic HLA-B27 positive or negative AU. Etanercept was recommended for patients with TRAPS syndrome, and for those with other autoinflammatory syndromes canakinumab or anakinra. In case of bilateral sarcoidosis, relapsing polychondritis or TINU syndrome, MTX was recommended along with systemic steroids. For patients with a flare of AU and Behçet disease, systemic steroids along with azathioprine or a calcineurin inhibitor were recommended. The indication of an immunomodulatory drug in patines with multiple sclerosis was considered to be decided with a neurologist. For patients refractory to all exposed above and/or intolerant, depending on AU type, a change to another classical immunomodulatory drug or to an anti-TNF was recommended (adalimumab, infliximab, certolizumab or). Except for patients with TINU, etanercept was not recommended because current evidence does not support the use of it to prevent AU flares.

Conclusions: In patients with non-infectious, non-neoplastic AU, these recommendations on the use of immunomodulators might be a guide in order to help in the treatment decision making, due to the lack of robust evidence or other globally accepted algorithms.

Disclosure of Interest: G. Espinosa Grant/research support from: GSK, Actelion, S. Muñoz-Fernandez: None declared, J. García Ruiz de Morales: None declared, J. Herreras Grant/research support from: Allergan and Abbvie, M. Cordero-Coma Grant/research support from: Abbvie, Merck Sharp & Dohme, and Allergan
DOI: 10.1136/annrhumdis-2017-eular.4810

FRI0603 CLINICAL IMPLICATIONS OF ULTRASONOGRAPHY IN MONITORING DISEASE ACTIVITY OF RELAPSING POLYCHONDRIITIS: THE ASSESSMENT OF AURICULAR CHONDRIITIS IN 3 CASES

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Background: Relapsing polychondritis (RP) is a rare systemic inflammatory disorder and might often be refractory. Therefore, the discover of imaging modality would be required on diagnosis and treatment of RP.

Objectives: To assess the clinical implications of ultrasonography (US) in monitoring disease activity of relapsing polychondritis (RP).

Abstract FRI0604 – Table 1. Patient demographic and clinical characteristics

Patient	1	2	3
Age, years	71	65	46
Sex	Male	Male	Female
Race	Caucasian	Caucasian	Caucasian
Tumor	Metastatic melanoma	Metastatic melanoma	Metastatic melanoma
CPI	Anti-CTLA4 antibody	Anti-PD-1 antibody	Anti-PD-1 antibody
Onset of arthritis-irAEs (days after initiation of CPI)	100	19	49
Pattern of arthritis	Symmetric polyarthritis involving small joints	Symmetric polyarthritis involving small and large joints	Symmetric polyarthritis involving small joints
History of autoimmune disease prior to CPI treatment	No	No	No, but known positive ANA
Autoantibody results	ANA, CCP neg RF: 27 (UNL: 15.9)	ANA, CCP, RF neg	CCP, RF, Ro, dsDNA neg ANA 1:640 (homogenous) La pos
Discontinuation of CPI treatment due to arthritis-irAE	N/A	No	Yes
Duration of anti-IL-6R antibody therapy, months	12	15	3
Tumor response to CPI as of December 2016 (RECIST 1.1)	Complete remission	Progressive disease	Progressive disease

CPI, immune checkpoint inhibitor; UNL, upper normal limit; ANA, antinuclear antibody; CCP, anti-cyclin citrullinated antibody; RF, rheumatoid factor; Ro, anti-SSA antibody; dsDNA, anti-double-stranded DNA antibody; La, anti-SSB antibody; N/A, not applicable.

Methods: Three cases of a 78-year-old man with RP, a 74-year-old woman with RP associated with optic perineuritis and a 42-year-old woman with RP associated with uveitis were assessed by US before and after treatments.

Results: Ultrasonography (US) of the auricle before treatment showed low-echoic swollen auricular cartilage with increased power Doppler signals (PDS) in all cases. US findings corresponded to the above-mentioned biopsy findings. After treatment with prednisolone combined with methotrexate, the auricular swelling completely resolved in all cases. Then, US findings also showed dramatic reductions in swelling of cartilage with the decrease in PDS.

Conclusions: US imaging can be used to differentiate between inflammation, vascular lesions, and tumors in the ear pinna. RP could be differentiated from the damage of repeated trauma (i.e. rugby) with producing subperichondrial serous effusion. As in the present cases, US imaging of the external ear and auricular cartilage in RP also facilitates evaluation of auricular lesions and monitoring of disease activity, especially when we consider the treatment response and the timing of drug tapering.

Disclosure of Interest: None declared

DOI: 10.1136/annrhumdis-2017-eular.1769

FRI0604 SUCCESSFUL TREATMENT OF ARTHRITIS INDUCED BY CHECKPOINT INHIBITORS WITH ANTI-INTERLEUKIN-6 RECEPTOR ANTIBODY: A CASE SERIES

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Background: Immune checkpoint inhibitors (CPIs) have significantly improved outcomes for patients with various cancers. However, CPIs are associated with immune-related adverse events (irAEs). Two to three percent of patients receiving a CPI develop arthritis. In general, severe irAEs are treated with a high-dose steroid and a tumor necrosis factor inhibitor (TNFi), usually infliximab; however, TNFi treatment is sometimes contraindicated and, furthermore, entails a theoretical concern of impairing antitumor immunity. Therefore, evidence showing the clinical benefits of non-TNFi biologics in the treatment of irAEs is of immediate interest.

Objectives: We described the effects of anti-IL-6R antibody for the treatment of arthritis-irAE.

Methods: Three patients receiving CPI developed arthritis and were treated with anti-IL-6R antibody. Patients were followed up to 15 months.

Results: All patients had metastatic melanoma (Table 1). No patient had a

Figure 1. Serial measurement of the patient's global assessment, tender joint count, and swollen joint count before (0 month) and after anti-IL-6R antibody treatment