Conclusion: In our AOSD cohort, DRRs at 24 months of TCZ and ANK were not statistically different, and they were both significantly higher than the DRR of TNFi. Previous use of biologic agents was found to have no effect on bDMARDs retention probability.

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SAT0520

CONTROVERSY ON DIAGNOSIS AND TREATMENT OF ADULT PATIENTS WITH SAPHO SYNDROME: MULTI-DISCIPLINARY INTERNATIONAL SURVEY

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Background: Synovitis, acne, pustulosis, hyperostosis, osteitis (SAPHO) is a rare disease involving skin and skeleton, with a potentially complicated and severe course, optimal management of which seems to require a collaborative rheumatology and dermatology care. Diagnostic criteria for SAPHO remain preliminary and lack validation. There are no evidence-based treatment algorithms in SAPHO due to lack of clinical trials in this rare medical condition.

Objectives: This study aimed to investigate the current practice in the diagnosis and treatment of SAPHO syndrome among the international rheumatology and dermatology communities.

Methods: We conducted a survey among the members of the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) combining international rheumatologists and dermatologists as well as members of the Japanese and Israeli Societies of Rheumatology.

Results: A total of 78 physicians participated in the survey: rheumatologists (83%, n=65), dermatologists (11.5%, n=9), and orthopedics (3.8%, n=3). SAPHO was considered a subtype of spondylarthritis by 48.7% (n=38), a subtype of psoriatic arthritis by 19.2% (n=15), a separate entity by 25.6% (n=20), and a subtype of reactive arthritis by 6.4% (n=5). Palmoplantar pustulosis was the most prevalent cutaneous manifestation (n=44, 56.4%) and anterior chest pain - the most prevalent osteoarticular manifestation (n=66, 84.6%). The majority (84.6%, n=66) voted for the update of the present diagnostic criteria by Khan 1994. Magnetic resonance imaging was considered the preferred imaging modality for the diagnosis of SAPHO by 41% (n=32). Conduction of bone biopsy for diagnosis of non-infectious osteitis was supported only by 10.3% (n=8). Patient-reported outcomes were considered the most appropriate measure for the assessment of disease activity by 47.4% (n=37). The treatment approach was overall similar among the rheumatology and dermatology communities, including non-steroidal anti-inflammatory drugs, bisphosphonates, conventional disease-modifying anti-inflammatory drugs, and biologics (Table 1).

Table 1. Preferences in the treatment choice of SAPHO

Treatment	% of responders
NSAIDs	76.6%
Glucocorticoids	32.5%
Conventional DMARDs	57.1%
Bisphosphonates	48.1%
Anti-TNF biologic therapy	75.3%
Other biologic therapy	20.8%
Antibiotic	14.3%
Tonsillectomy	5.1%
Isotretinoin	5.2%
Topical therapy	10.4%
Intra-articular steroid injection	7.8%

Legend: NSAIDs – non-steroidal anti-inflammatory drugs; DMARDs – disease modifying anti-rheumatic drugs

Conclusion: Our study underlines the controversy on diagnosis and treatment of SAPHO syndrome among specialists in rheumatology and dermatology and emphasizes an unmet need for update and validation of diagnostic criteria and treatment approach.

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SAT0521

EVALUATION OF LIPID PROFILE IN PATIENTS WITH AVASCULAR NECROSIS

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Background: Avascular necrosis (AN) is a disabling disease affecting predominantly young men. It steadily progresses to secondary osteoarthritis. The rate of disability is high, because hip joint is most commonly affected by AN; moreover, the rate of bilateral hip joint involvement is also high. The key event in the pathogenesis of AN is circulation disorder which results in ischemia and, furthermore, death of bone tissue.

Nowadays the data about lipid metabolism in patients with AN. Besides, there is contradictory data about the role of homocysteine in the risk of cardiovascular events. Based on these, it is topical to investigate lipid metabolism and endothelial function in patients with AN.

Objectives: The aim of the present study was to investigate lipid metabolism and endothelial function in patients with different stages of AN in order to find risk factors for incidence and progression of this disease.

Methods: We recruited 41 patients with AN of the femoral head or femoral condyles aged 51 (35-64) years, 56,1% (n=23) were male. The inclusion criteria was diagnosis of AN confirmed by X-Ray, CT or MRI. The exclusion criteria were: traumatic AN, Legg-Calve-Perthes disease, connective tissue systemic diseases. Also we divided patients into subgroups with early (39% (n=16)) and late (61,0% (n=25)) stages of AN.

Patients of the control group (n=32) were comparable by age and gender. The data was proceeded using non-parametric and descriptive statistics. We evaluated the following parameters: homocysteine, total cholesterol, high-density lipoprotein cholesterol, low-density lipoprotein cholesterol, high-density lipoprotein cholesterol, very low-density lipoprotein cholesterol, cholesterol ratio, apolipoprotein A1, apolipoprotein B.

Results: In patients with AN we observed higher level of homocysteine (12,119 (7,771-14,38) vs. 7,911 (6,612-10,54) $\mu\text{mol/L}$, $p=0,05$). The results are consistent with the data that higher homocysteine level is associated with higher risk for cardiovascular events (1). There is literature data about elevated homocysteine level in patients with AN, which was associated with lower levels of vitamin B12 and folic acid. Thus, interpretation of homocysteine significance is more reliable in association with vitamin B12 and folic acid levels.

Figure 1. Homocysteine levels in patients of control group and in patients with avascular necrosis

Also, we observed that level of HDLP-C is higher in patients with early stages than in late stages of AN (1.55 (1.31-1.57) vs. 1.23 (1.04-1.36) mmol/l, $p=0.04$). Thus, HDLP-C can be interpreted as a protective factor against contralateral joint involvement in AN patients. The data obtained is consistent with the existing data that HDLP-C lowers the risk for cardiovascular events.

Figure 2. HDLP-C levels in patients with early and late stages of avascular necrosis

Conclusion: The data obtained indicate a significant role of dyslipidemia in the pathogenesis of AN in the context of vascular theory.

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SAT0522

PROGRESSION OF VISION-RELATED QUALITY OF LIFE AND IDENTIFICATION OF RISK FACTORS IN NON-INFECTIOUS UVEITIS PATIENTS

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Background: Uveitis are characterized by inflammation of the middle layer of the eye wall. In developed countries uveitis are the second major treatable cause of blindness in those 20–65 years of age. Additionally, more than 50% of the subjects affected with these conditions will develop complications related to the uveitis, and more than 30% will suffer visual impairment. As a result, these conditions are associated with an important burden. The assessment of the patient's quality of life (QoL) through standardized and validated questionnaires allows us to evaluate objectively the burden of the disease. Several studies have shown that the QoL of uveitis patients is reduced when compared with that of general population. Moreover, several socio-demographic and clinical related characteristics have been associated with impaired QoL. However, no longitudinal analysis of the vision-related (VR) QoL in clinical practice has been carried out.

Objectives: To describe VR-QoL in non-infectious uveitis (NIU) patients during a follow-up period of two years. Furthermore, to analyse the influence of socio-demographic, clinical and treatment factors on the progression of VR-QoL.

Methods: Longitudinal prospective study which includes patients examined in a multidisciplinary tertiary uveitis clinic, with a diagnosis of NIU. In each of these patients a yearly determination of VR-QoL was carried out following the VFQ-25 questionnaire, finally including all those who had completed at least an initial questionnaire and a second one after two years of follow-up. Analysis of risk factors at baseline in repeated VFQ-25 measurements was carried out by generalized estimating equations (GEE) models. Variables related to demographic, clinical and treatment factors with a determination of p -value <0.15 were included in

multivariable models, which were then compared using the *Quasi Akaike Information Criteria* (qAIC). A local Ethics Committee approved the execution of this project.

Results: 128 patients were included, 117 of which also had an evaluation after the first year of follow-up. 55.5% were female with a median age of 34 years at the start of symptoms and of 37 years at the moment of attending our clinic for the first time. First evaluation of VR-QoL was determined a median (p25-p75) of 6.1 (1.8-13.1) years after that first visit. The most frequent locations of NIU were anterior (41.1%), panuveitis (27.4%), posterior (16.1%) and intermediate (15.3%). At our first evaluation, 27.3% of patients were receiving treatment with topical steroids, 22.3% oral, 49.2% immunosuppressant drugs (both synthetic and/or biological) and 19.05% biological therapies. The median (p25-p75) VFQ25 determinations at baseline, first and second years of follow-up were 0.87 (0.78-0.93), 0.88 (0.80-0.93) y 0.89 (0.81-0.94), with no significant differences (first year vs. Baseline $p = 0.54$; 2 years vs. Baseline $p = 0.61$).

In the GEE multivariable models the presence at baseline of permanent incapacity due to NIU, concomitant thyroid disease, worse visual acuity, unilateral pattern, cataracts, retinal vasculitis, epiretinal membrane and use of azathioprine were independently associated with a worse VR-QoL (Table 1).

Table 1. Risk factors related to VR-QoL in patients with NIU

Variables	Coef. (IC 95%)	p-value
Visual acuity	23.6 (12.3 - 34.8)	<0.01
Permanent incapacity	-24.8 (-33.7 - -15.9)	<0.01
Unilateral NIU	-2.9 (-5.7 - -0.006)	0.05
Cataracts	-5.2 (-10 - -0.3)	0.037
Vasculitis	-13.3 (-23.4 - -3.1)	0.011
Epiretinal membrane	-6.8 (-12.7 - -0.8)	0.026
Azathioprine	-7.5 (-14.7 - -0.3)	0.041

Conclusion: During these two years of follow-up, no significant changes have taken place regarding VR-QoL in patients with NIU assessed at a tertiary centre. Other than visual acuity at baseline, certain ocular manifestations and clinical comorbidities have also been shown to have an independent effect on the VR-QoL of these patients.

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SAT0523

BIOLOGICAL THERAPY IN REFRACTORY ATYPICAL OPTIC NEURITIS. MULTICENTER STUDY

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Background: Optic Neuritis (ON) is an inflammation of the optic nerve. Its most common presentation is demyelinating typical ON. Atypical ON is rare, severe, non-demyelinating and can be isolated or associated to different diseases including autoimmune diseases. If it is not treated, it can lead to devastating visual results. Conventional treatment includes systemic corticosteroids and conventional immunosuppressants (CIS).

Objectives: Our aim was to assess the efficacy of biological therapy in atypical ON refractory to conventional treatment.

Methods: Open-label multicenter study including 19 patients diagnosed with atypical ON refractory to systemic corticosteroids and at least one CIS. The main outcomes assessed were Best Corrected Visual Acuity (BCVA) and optic nerve and ganglionar cells Optical Coherence Tomography (OCT). These outcome variables were recorded at baseline, 1 week, 2 weeks, 1 month, 3 months and 6 months and 1 year after biological therapy onset.