and a systematic search was carried out specifically for identification of deleteri-
ous genetic variants in genes involved in novel inflammatory pathways.

Results: The index case was coming from a consanguineous family of Assyrian
origin, who is now 22-year-old male. He presented to our outpatient clinic with
recurrent attacks of fever, urticarial rash on the extremities and trunk, conjunctiv
infections and arthralgia, without a trigger or more frequently following an infec-

tion. His attacks started when he was 13, and two to three days lasting attacks
recurred more frequently during warm weather conditions or following hot baths.
His attacks were highly elevated CRP and ESR during attacks, but his acute phase
response did not return to normal values in between the flares. Low C3 and C4
values were also observed during asymptomatic periods. His ANA test became
positive during the course of his disease, with an increasing titer in the last year.
He responded partially to corticosteroids as well as canakinumab and anakinra
treatments, and he is currently on low dose steroids and 100 to 200 mg/day ana-
kinra. Whole exome sequencing revealed a deleterious homozygous c.769C>T
mutation in AGBL3 (ATP/GTP binding protein-like 3) gene, which results in early
termination of the protein (p.Gln257Ter) and deletion of the functional carboxy-
peptidase domain. This protein belongs to metallo carboxypeptidases that medi-
ate both deglutamylation and deaspartylation of target proteins. AGBL3 is
suggested to catalyse the deglutamylation of polyglutamate side chains, espe-
cially in proteins such as tubulins. Also, STRING search revealed the interaction
of AGBL3 with complement regulatory proteins, such as CD46, CD55, and CD59,
which are potent inhibitors of the complement membrane attack complex. We
searched databases from Turkey and other sources including 1000 Genomes
Project data, and we could not identify this variant in other individuals.

Conclusions: This study identifies the AGBL3 metallo carboxypeptidase gene as a
potentially autoinflammatory gene involved in a novel pathway and possibly asso-
ciated with hypocomplementemic urticarial vasculitis phenotype. Previously,
DNASE1L3 mutations have been associated with hypocomplementemic urticarial
vasculitis and systemic lupus erythematosus phenotype. The loss of function
mutation in the AGBL3 may result in a potent innate inflammatory response as
well as autoimmunity through a new pathway, which is resulting in lower comple-
ment levels and ANA positivity along with recurrent inflammatory episodes. This
complex phenotype explains a partial response to the IL-1 block, and further
studies in patients/families with a similar phenotype are needed.

Disclosure of Interest: None declared


SAT0598

SYSTEMATIC LITERATURE REVIEW ON THE EFFICACY AND SAFETY OF IMMUNOMODULATORY DRUGS IN PATIENTS WITH NONFICIOUS INTERMEDIATE AND POSTERIOR UVEITIS, PANUVEITIS AND MACULAR ODEMA

A. Gómez Gómez1,2*, E. Loza1, M. P. Rosario-Rodrigo1, G. Espinoza1, J. M. M. Herreras5, J. M. Herreras6, S. Muñoz7,8, M. Cordero-Coma9.

1Rheumatology, Hospital Infanta Sofía, Madrid; 2Unidad de Uveitis, Hospital Clínico San Carlos. Madrid, Spain

Background: Intermediate and posterior uveitis (IU, PU) as well as posterior uveitis (PU) and macular oedema (MO) are sight-threatening conditions that represent a significant burden for patients and healthcare systems. There is a need for better treatment and understanding of the underlying mechanisms. We aimed to provide a systematic literature review regarding the efficacy and safety of immunomodulatory drugs in patients with intermediate and posterior uveitis. Methods: A systematic literature search was performed in MEDLINE, EMBASE, Cochrane Library, and other databases up to July 2017. The study was limited to articles published in English or Spanish. The primary outcome was the response to immunomodulatory agents, defined as a >50% decrease in the vitreous haze and retinal vascular leakage. The secondary outcomes were changes in visual acuity, central macular thickness, and other clinical parameters. Results: The search strategy yielded 1103 articles, of which 31 met the inclusion criteria. The results showed that immunomodulatory drugs such as corticosteroids, methotrexate, mycophenolate mofetil, and biological agents like anti-CD20 antibodies and anti-IL-12/23 antibodies were effective in the treatment of intermediate and posterior uveitis. However, more studies are needed to confirm the long-term effectiveness and safety of these agents. Conclusion: Immunomodulatory drugs offer promising options for the treatment of intermediate and posterior uveitis, with further research needed to identify the optimal therapies.
A. Makol.

temic features included dysphagia(, 5 photosensitivity(,4 dry eyes(, 3 pericarditis(,5 Anti-CCP(,3 SS-A(,3 SS-B(,2 Anti-DsDNA(.1 A third of patients had concomitant lomatous nephritis(, 1 JRA(,1 psoriasis(,1 myasthenia gravis and ITP(.1 A third of patients had concomitant pleuritis(.1 Several patients had positive autoimmune serologies: ANA(, 8 RF

In a case series previously published by our study group, the efficacy of the combined use of KS and immunosuppressant was retrospectively studied.[1] In this study, the efficacy of immunosuppressive therapy has been demonstrated with prospective approach.

REFERENCE:

Disclosure of Interest: None declared


SAT0600


A.S. Sandhu, C.S. Crowson, D.A. Wetter, G.A. McKenzie, A. Makol. MAYO CLINIC, Rochester, USA

Background: Multicentric reticulohistiocytosis (MRH) is a rare systemic disease characterised by papulo-nodular skin eruptions and a rapidly progressive, deforming arthritis. It can mimic rheumatic disorders such as rheumatoid arthritis or dermatomyositis. Immunosuppression is often helpful, but challenging due to the association of MRH with malignancy.

Objectives: To examine the clinical correlates and outcomes of MRH and its association with malignancy and other autoimmune conditions

Methods: A retrospective review of all patients with MRH treated at our institution between 01/01/1980 and 04/30/2017 was performed. Demographics, clinical features, laboratory tests, imaging findings, histopathology, treatments and outcomes were abstracted. Data on autoimmune disorders and malignancies before and after MRH diagnosis were collected.

Results: We identified 24 patients with MRH (58% female, 75% Caucasian, mean age at diagnosis 52.4 years). Median length of follow up was 2.3 years. All patients had confirmed diagnosis by histopathology(23 skin, 7 synovial). All patients had cutaneous and articular involvement. Nodules in skin lesions were noted in 12/24 patients (perungual area and dorsal hand in 87%, periarticular 61% around DIP 42%, PIP 25%, MCP 8%), face 54%, arms 42%, back 29%, neck 21%, legs 21%, ears 12%, scalp 12%). Mucosal nodules were noted in 30%. Regarding articular involvement, 22 (92%) had arthralgia, 21 (88%) patients had joint swelling, and 13 (54%) had synovitis. Frequency of joint involvement was upper extremity PIP(29%), >upper extremity DIPs, MCPs, wrist >MPRs, Toes >Knees > Elbows. Radiographic erosions were noted in 67% patients. Constitutional symptoms included fatigue,[5] unintentional weight loss,[5] lymphadenopathy[4] and pruritis.[1] Systemic features included dysphagia,[5] photosensitivity,[4] dry eyes,[5] pericarditis[4] and pleuritis.[1] Several patients had positive autoimmune serologies: ANA,[4] RF,[4] Anti-CCP,[4] SS-A,[3] SS-B[2] Anti-DsDNA.[1] A third of patients had concomitant autoimmune disorders: inflammatory arthritis,[5] Sjögrens,[1] chronic focal granulomatous nephritis,[1] IBD,[1] sarcoidosis,[5] myasthenia gravis and ITP.[1] A third of patients(8/24) had malignancy:malignant melanoma(3), breast cancer(2), basal cell carcinoma(2) and 1 each with ovarian carcinoma, squamous cell carcinoma lung, peritoneal adenocarcinoma, and endometrial carcinoma. Most patients were treated with systemic glucocorticoids[1,4] and oral DMARDs[2]: methotrexate,[2] cyclophosphamide,[1] chlorambucil[2] and cyclosporine.[1]

Biologics were used in 4 patients(1 infliximab,2 etanercept,1 adalimumab). Only 2 patients had complete resolution of their symptoms, while majority showed only partial improvement. 10 (44%) patients developed joint deformities involving: wrist(3), MCP(4), PIP(4), DIP(3), knee(2) and MTP.[1] None had arthritis mutilans. 75% patients were alive at last follow up.

Conclusions: To our knowledge, this is the largest series of MRH patients from a single institution, highlighting the rarity of the condition, and an unmet need for treatment options that can allow sustained disease remission. We emphasise the need for histopathology to distinguish it from mimicking rheumatic conditions and initiating early aggressive treatment to potentially prevent deforming joint disease. A high vigilance for malignancy and other autoimmune diseases is necessary.

Disclosure of Interest: None declared


SAT0601

ANTI-HLA-RECEPTOR TOCILIZUMAB IN GRAVES’ ORBITOPATHY. MULTICENTER STUDY OF 29 PATIENTS

B. Atienza-Mateo1, V. Calvo-Rio1, J.L. Martín-Varillas1, R. Demetrio-Pablo1, E. Valls-Pascua2, B. Valls-Espinosa2, O. Maíz-Alonso3, A. Blanco4, I. Torre4, V. Rodríguez-Mendez1, Á. García-Aparicio5, R. Veroz González6, V. Jovani Casano7, D. Peiteado López8, M. Sanchez Orgaz3, S. Castañeda Sanz9, E. Tomero2, F.J. Toyos Sáenz10, M. Valverana Pinillos11, E. Aurrecochea12, A. Mora12, M. A. González-Gay1, R. Blanco1, R. Jovaní Valencia12, R. Veroz González6, V. Jovani Casano7, D. Peiteado López8, M. Sanchez Orgaz8, S. Castañeda Sanz9, E. Tomero2, F.J. Toyos Sáenz10, M. Valverana Pinillos11, E. Aurrecochea12, A. Mora12, M. A. González-Gay1, R. Blanco1

Background: Multicentroc reticulohistiocytosis (MRH) is a rare systemic disease characterized by papulo-nodular skin eruptions and a rapidly progressive, deforming arthritis. It can mimic rheumatic disorders such as rheumatoid arthritis or dermatomyositis. Immunosuppression is often helpful, but challenging due to the association of MRH with malignancy.

Objectives: To examine the clinical correlates and outcomes of MRH and its association with malignancy and other autoimmune conditions

Methods: A retrospective review of all patients with MRH treated at our institution between 01/01/1980 and 04/30/2017 was performed. Demographics, clinical features, laboratory tests, imaging findings, histopathology, treatments and outcomes were abstracted. Data on autoimmune disorders and malignancies before and after MRH diagnosis were collected.

Results: We identified 24 patients with MRH (58% female, 75% Caucasian, mean age at diagnosis 52.4 years). Median length of follow up was 2.3 years. All patients had confirmed diagnosis by histopathology (23 skin, 7 synovial). All patients had cutaneous and articular involvement. Nodules in skin lesions were noted in 12/24 patients (perungual area and dorsal hand in 87%, periarticular 61% around DIP 42%, PIP 25%, MCP 8%), face 54%, arms 42%, back 29%, neck 21%, legs 21%, ears 12%, scalp 12%). Mucosal nodules were noted in 30%. Regarding articular involvement, 22 (92%) had arthralgia, 21 (88%) patients had joint swelling, and 13 (54%) had synovitis. Frequency of joint involvement was upper extremity PIP (29%), >upper extremity DIPs, MCPs, wrist >MPRs, Toes >Knees > Elbows. Radiographic erosions were noted in 67% patients. Constitutional symptoms included fatigue,[5] unintentional weight loss,[5] lymphadenopathy[4] and pruritis.[1] Systemic features included dysphagia,[5] photosensitivity,[4] dry eyes,[5] pericarditis[4] and pleuritis.[1] Several patients had positive autoimmune serologies: ANA,[4] RF,[4] Anti-CCP,[4] SS-A,[3] SS-B,[3] Anti-DsDNA.[1] A third of patients had concomitant autoimmune disorders: inflammatory arthritis,[5] Sjögrens,[1] chronic focal granulomatous nephritis,[1] IBD,[1] sarcoidosis,[5] myasthenia gravis and ITP.[1] A third of patients(8/24) had malignancy:malignant melanoma(3), breast cancer(2), basal cell carcinoma(2) and 1 each with ovarian carcinoma, squamous cell carcinoma lung, peritoneal adenocarcinoma, and endometrial carcinoma. Most patients were treated with systemic glucocorticoids[1,4] and oral DMARDs[2]: methotrexate,[2] cyclophosphamide,[1] chlorambucil[2] and cyclosporine.[1]

Biologics were used in 4 patients(1 infliximab,2 etanercept,1 adalimumab). Only 2 patients had complete resolution of their symptoms, while majority showed only partial improvement. 10 (44%) patients developed joint deformities involving: wrist(3), MCP(4), PIP(4), DIP(3), knee(2) and MTP.[1] None had arthritis mutilans. 75% patients were alive at last follow up.

Conclusions: To our knowledge, this is the largest series of MRH patients from a single institution, highlighting the rarity of the condition, and an unmet need for treatment options that can allow sustained disease remission. We emphasise the need for histopathology to distinguish it from mimicking rheumatic conditions and initiating early aggressive treatment to potentially prevent deforming joint disease. A high vigilance for malignancy and other autoimmune diseases is necessary.

Disclosure of Interest: None declared