patients with chronic joint symptoms in the Atlántico Department of Colombia.

Methods: Sixty-seven patients with chronic arthralgia and 15 patients without arthralgia were followed up a mean of 40 months after chikungunya infection. The patients came from a larger cohort of 500 patients previously followed up 20 months after infection. Those consenting to a 40-month in-person follow-up were included here. Tender joint counts, a pain intensity visual analogue scale (VAS), Health Assessment Questionnaire-Disability Index (HAQ-DI) and the EuroQol overall health VAS (EQ-VAS) were completed. A 21-item musculoskeletal stiffness questionnaire (MSQ) was completed and summarized as percentage scores for overall stiffness and its components: stiffness severity, physical impact and psychosocial impact.

Results: The 82 patients (12 male and 70 female) had a mean age 51 $\pm$ 14 years. Forty-two out of sixty-seven patients with arthralgia and 3/15 patients without arthralgia reported musculoskeletal stiffness. Stiffness in those patients had a median severity of 28% (IQR 0-42). An impact of their stiffness on physical activities was reported by 39/45 patients (87%) and psychosocial impact by 32/45 patients (71%). Overall MSQ score was a median of 16% (IQR 0-34). Mean tender joint count in patients reporting arthralgia was 6.2 $\pm$ 7.1, mean pain intensity 65 $\pm$ 20 out of 100, mean HAQ-DI = 0.54 $\pm$ 0.52, and a mean EQ-VAS = 68 $\pm$ 62 out of 100. Overall stiffness scores were poorly correlated with tender joint counts ($r^2=0.17$) and pain intensity ($r^2=0.22$). Stiffness scores were more strongly associated with the HAQ-DI ($r^2=0.52$) and EQ-VAS overall health VAS scores ($r^2=0.46$), whereas tender joint counts were not: $r^2=0.22$ for HAQ-DI and $r^2=0.21$ for EQ-VAS.

Conclusion: Musculoskeletal stiffness following chikungunya infection is distinct from the persistent arthralgia usually reported. It does not necessarily occur in the same patients and is poorly correlated with joint pain severity. Stiffness, as measured by this questionnaire, may be more strongly associated than arthralgia with overall health and disability indices in patients with chikungunya disease. The MSQ is a potentially useful instrument for assessing symptoms in chronic chikungunya disease.

Disclosure of Interests: Hugh Watson Shareholder of: Sanofi, Employee of: Sanofi, Sarah Tritsch: None declared, Liliana Encinales: None declared, Andres Cadena: None declared, Carlos Cure: None declared, Alexandra Porras: None declared, Alejandro Rico Mendoza: None declared, Aileen Chang: None declared
DOI: 10.1136/annrheumdis-2019-eular.4048

SAT0474 AUTOIMMUNE MANIFESTATIONS OF VISCERAL LEISHMANIASIS IN CHINESE PATIENTS

Xixi Chen, Qiao Zhou, Rui Wu, Jia Cheng, Jian Liu, Bin Zhou, Li Long. *Sichuan Provincial People's Hospital, Rheumatology, Chengdu, China*

Background: Visceral leishmaniasis (VL), caused by the protozoan Leishmania species, is the most severe form of leishmaniasis. The parasite migrates to the internal organs such as the liver, spleen, and bone marrow, and if left untreated, will almost always cause the host to die [1]. Due to polyclonal B cells activation, VL may present signs and symptoms resembling those of rheumatic diseases, especially systemic lupus erythematosus (SLE) [2-4]. This can sometimes lead to mis-diagnosis and treatment of corticosteroids.

Objectives: To analyze 27 Chinese VL patients retrospectively and focused on their autoimmune findings that could help clinicians to differentiate VL from SLE.

Methods: 27 in-hospitalized VL patients in our hospital from 2006 to 2015 were analyzed. VL was diagnosed by the presence of high titers of anti-leishmania antibodies in the blood or by demonstration of intracellular parasites on bone marrow aspiration. All patients were negative for hepatitis B, hepatitis C and human immunodeficiency viruses. Autoimmune antibodies were detected. Levels of serum globulins, complement C3, C4 and RF were evaluated. Coagulation parameters, including prothrombin time (PT) and activated partial thromboplastin time (APTT) were also tested.

Results: The basic characteristics and laboratory findings of the 27 patients were summarized in Table 1. All patients had hepatosplenomegaly. 38.9% had positive ANA, but the titer was no more than 1:320. None of the patients had positive anti-Sm antibody and only 1 had anti-dsDNA antibody. 89.5% had increased IgG level and none had decreased C3 or C4.

All patients were cured with sodium stibogluconate, and ANA titers decreased after treatment.

Conclusion: VL may mimic symptoms of SLE due to polyclonal activation of B cells. However, hepatosplenomegaly is a common symptom seen in

VL but not so common in SLE. Furthermore, VL patients don't have typical autoantibodies of SLE, their ANA titer are normal to low and they tend to have normal complements, which could help clinicians to differentiate these two diseases.

Table 1. Basic characteristics and clinical manifestations of VL patients

Sex (Female/Male)	4/23
Age (median, range)	37 (9-59)
Disease duration (months) (median, range)	1 (0.17-24)
Anti-leishmania antibodies positive	27
Parasites positive in bone marrow	24
Fever	25
Hepatosplenomegaly	27
Weight loss	14
Anemia	26
Leucocytopenia	23
Thrombocytopenia	20
Prolonged APTT	12/21
Prolonged PT	12/21
Positive ANA	7/18

REFERENCES

- [1] Martins-Melo FR, Lima Mda S, Ramos ANAN Jr., and, et al. Mortality and case fatality due to visceral leishmaniasis in Brazil: a nationwide analysis of epidemiology, trends and spatial patterns. *PLoS One*. 2014; 9: e93770.
- [2] Ozlem Guzel Tunccan, Abdurrahman Tufan, Gülçin Telli, et al. Visceral Leishmaniasis Mimicking Autoimmune Hepatitis, Primary Biliary Cirrhosis, and Systemic Lupus Erythematosus Overlap. *Korean J Parasitol*. 2012; 50 (2): 133-6
- [3] Voulgarelis M, Voulgari PV, Serelis J, et al. Visceral leishmaniasis mimicking systemic lupus erythematosus. *J Clin Rheumatol*. 2010;16(4): 203-4.
- [4] Drosos AA, Skopouli FN. Visceral leishmaniasis resembling systemic lupus erythematosus. *Clin Rheumatol*. 2003; 22(6):452-5.

Acknowledgement: Thanks to my colleagues who help me in writing the paper and analyzing all the data.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.1493

SAT0475 ECHINOCOCCOSIS AND AUTO-IMMUNE INFLAMMATORY ARTHRITIS; REPORT OF 8 CASES AND REVIEW OF THE LITERATURE

Pascal Zufferey¹, Zambaz Camille¹, Rudiger Muller², Boillat-Blanco Noémie³, Thomas Huegle¹, Hasler Paul⁴, Peter Villiger⁵. ¹RHU, DAL/CHUV, Lausanne, Switzerland; ²rheumatology, Medizinische Universitätsklinik kantonspital, Aarau, Switzerland; ³infectiology, Medecine/CHUV, Lausanne, Switzerland; ⁴rheumatology, Medizinische universitätsklinik kantonspital, Aarau, Switzerland; ⁵rheumatology, Immuno and allergology, University hospital of Bern, Bern, Switzerland

Background: The prevalence of Echinococcosis in Western Europe and Switzerland has been rising in the past 20 years: >30 cases per year have been reported since 2005 (1). A few case reports (2) and some experimental animal studies (3) have suggested that the immunosuppression linked to inflammatory arthritis and their treatments could favor the development and the growth of parasitic lesions. On the other hand, a recent French study (4) has shown that the prevalence of Echinococcosis in arthritis patients was close to the normal population. The characteristics of the parasitic disease were quite similar whether inflammatory arthritis was present or not.

Objectives: To evaluate the yearly recent incidence of this disease among patients with inflammatory arthritis in Switzerland and to search