

**Disclosure of Interests:** Ana V Orenes Vera: None declared, I Vázquez-Gómez: None declared, L Montolio-Chiva: None declared, Eduardo Flores: None declared, Desamparados Ybañez: None declared, Elia Vallis-Pascual Grant/research support from: Roche, Novartis, and AbbVie, Speakers bureau: AbbVie, Lilly, Pfizer, MSD, Novartis, Janssen, Bristol Myers Squibb, UCB Pharma, À Martínez-Ferrer: None declared, A Sendra-García: None declared, V Núñez-Monje: None declared, Inmaculada Torner Hernández: None declared, Juanjo J Alegre-Sancho Consultant of: UCB, Roche, Sanofi, Boehringer, Celltrion, Paid instructor for: GSK, Speakers bureau: MSD, GSK, Lilly, Sanofi, Roche, UCB, Actelion, Pfizer, Abbvie, Novartis, Nagore Fernandez-Llanio: None declared

**DOI:** 10.1136/annrheumdis-2020-eular.5390

#### FRI0447 FIRST COMPREHENSIVE LONG-TERM ASSESSMENT OF MUSCULOSKELETAL CONSEQUENCES AMONG EBOLA SURVIVORS

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**Background:** The tremendous size of the 2013-2016 West African outbreak of Ebola virus disease (EVD) resulted in a sizeable population of survivors, many reporting short-term sequelae such as arthralgia and myalgia.

**Objectives:** We aimed to report a detailed and long-term description of patients' musculoskeletal (MS) symptoms.

**Methods:** We performed a cross-sectional study following systematic rheumatological screening of patients included in the Postebogui cohort (Conakry district). We used regression models to establish the magnitude of EVD as a risk factor for developing chronic MS pain by comparison with a control cohort and to establish risk factors for developing MS pain among survivors.

**Results:** The study included 313 patients (55.6% female), with a median age of 28.2 years (IQR 21-37), and a median time from ETC discharge to rheumatological visit of 26.2 months (IQR 23-30). Chronic MS pain was reported in 216 (69%) patients, and was predominantly mechanical (48%). Enthesis and painful peripheral joints were largely involved (91%) with symmetrical distribution. Previous Ebola infection was a major risk factor for chronic MS pain (aOR, 6.662 [95% CI, 4.522-9.921]). Among survivors, increasing age (OR 1.14, 95% CI 1.08-1.22) and female gender (OR 3.58, 95% CI 1.22-11.80) were both associated with persistent MS pain, while myalgia experienced during the acute phase of EVD appeared protective (OR 0.14, 95% CI 0.04-0.42).

**Conclusion:** Our study provides the most accurate long-term description of MS disorders among Ebola survivors. Joint and muscle pain sequelae are frequent and require specialized care.

**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2020-eular.1218

#### FRI0448 FOUR CASES OF SYPHILIS MIMICKING RHEUMATOLOGICAL CONDITIONS PRESENTING TO THE GENERAL RHEUMATOLOGY SERVICE AT ST GEORGES HOSPITAL, LONDON, UK IN 2018-2019

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**Background:** Sir William Osler once wrote: "He, who knows syphilis, knows medicine"

Whilst the Tuskegee Syphilis trials live in infamy, the advent of successful penicillin treatment and sexual health education resulted in the lowest recorded incidence ever in 2001<sup>1</sup>.

Unfortunately, cases of syphilis have nearly tripled in the past decade (from 2,847 in 2009 to 7,541 in 2018 in the UK)<sup>1</sup>. WHO now estimates the global median prevalence of Syphilis, among men who have sex with men, is 6%<sup>2</sup>

The current cohort of clinicians will therefore have limited clinical experience of Syphilis, which can often mimic rheumatic conditions. We present the clinical experience of a tertiary teaching centre hospital.

**Objectives:** To identify the scope of clinical cases, with a diagnosis of Syphilis, during 2018-2019 at St Georges University Hospital, London, UK.

**Methods:** Clinical cases were identified by health professionals and a retrospective review of medical records was undertaken.

**Results:** There were 4 cases identified during 2018-19.

**Case 1:** The patient was diagnosed with bilateral uveitis secondary to primary syphilis, and immunosuppression may have contributed to this.

**Case 2:** The rash developed after the initial presentation and an extended infection screen was performed.

**Case 3:** The patient had a 6 month duration of symptoms and had had a negative sexual health screen 1 year prior to presentation.

**Case 4:** The patient had no features of extra pulmonary sarcoidosis and an infectious screen was undertaken.

All 4 cases were referred to the Infectious Disease Unit for treatment. 3 patients received standard treatment with Penicillin, and 1 patient received an oral course of Doxycycline, due to a penicillin allergy.

2 of the 4 cases had complete resolution of symptoms, and 2 of the cases had only partial resolution of symptoms at the time of publication.

**Conclusion:** Syphilis can present with an inflammatory arthritis, PMR and GCA -type symptoms, ocular inflammation, neurological disturbance and rashes that can mimic autoimmune conditions.

Our cases highlight the increasing incidence, as well as the risk of reactivation following immunosuppression. Current practice does not advise routine testing for syphilis prior to initiation of immunosuppressive therapy. However the rising incidence should prompt careful evaluation, and detailed sexual history, particularly in high risk groups. The diagnostic test interpretation and treatment requires close collaboration with Infectious Diseases Specialists.

**References:**

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[2] Report on global sexually transmitted infection surveillance 2018, WHO, ISBN: 978-92-4-156569-1

**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2020-eular.4270

#### FRI0449 MANAGEMENT AND OUTCOME OF SEPTIC ARTHRITIS OF NATIVE JOINT: A NATIONWIDE SURVEY

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Patient	Age	Sex	Past Medical History	Symptomatology	Risk Factors	Presumed Diagnosis	Serology
1	69	Male	Hypertension GCA	Bilateral visual loss, rash	MSM Prednisolone Tocilizumab	GCA-related visual loss	RPR 1:64 TPPA 1: 10248
2	46	Female	Nil	Joint pain and swelling, rash	Hepatitis B Core Antibody positive MSM	Undifferentiated Inflammatory Arthritis Primary Syphilis	RPR 1: 16
3	40	Male	Nil	Joint pain, alopecia, uveitis and rash, weight loss			RPR 1: 16 TPPA 1: 10248
4	86	Female	Pulmonary Sarcoidosis, Squamous cell carcinoma of left maxillary sinus	Lower motor neuron facial nerve palsy	Prednisolone	Sarcoidosis	RPR 1:4 TPPA 1:80

GCA: Giant cell arteritis, MSM: Men who have sex with men, RPR: rapid plasma regain, TPPA: Treponema pallidum particle agglutination assay

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### Background:

**Objectives:** To describe current management and outcome of septic arthritis on native joint in French rheumatology departments.

**Methods:** Retrospective, nation-wide multicentric study. 127 French rheumatology departments were contacted to report 10 successive cases of septic arthritis on native joint that occurred between the 01/01/16 to 31/12/17 (excluding mycobacteria). Characteristics, diagnosis procedure, therapeutic management and outcome were recorded.

**Results:** 52 centers included 363 patients (mean age 64±18.7 years, mean Charlson comorbidity index 4±3). 28.3% patients had a preexisting arthropathy on affected joint. Monoarthritis was observed in 89.6% patients, knee was the most frequent site (38.9%). The most frequent pathogens were *Staphylococcus sp* (50.7%) and *Streptococcus sp.* (23.3%). Bacteremia was found in 156 (45.1%) patients and endocarditis in only 12 (3.0%). Management was heterogeneous. All patients received antibiotics for a mean duration of 46.7±22 days (including intravenous route: 17.3±15.4 d). An initial monotherapy was administered in 42.3% of patients. Surgical procedure (mostly lavage 70.6%) was performed in 171 (48.3%), joint immobilization in 128 (35.3%) (median duration of 21.7±14.1 days). 94 (29.2%) patients have had serious complications including 29 (9.5%) death. Factors associated with death are reported in the table.

**Conclusion:** This study shows that management of septic arthritis is very heterogeneous with a still high rate of morbidity and mortality. We identified age, comorbidities, bacteremia and recent antibiotherapy were associated with mortality. Of note, duration of antibiotics was not. Thus, new guidelines are needed in order to facilitate septic arthritis management.

### Table:

Factors	Survivor (N=276)	Dead (N=29)	Univariate analysis p	Adjusted Odds ratio (95%CI)	Multivariate analysis p
Age	65 (16-97)	82 (32-98)	<0,001	1,07 (1,03-1,12)	< 0,001
Charlson's index	1 (0-12)	2 (0-9)	0,0001	1,3 (1,05-1,63)	0,018
Delay before antibiotic initiation	8,5 (0-310)	5 (0-75)	0,0484	0,99 (0,96-1,02)	0,562
Corticosteroid in the previous 3 months	13,9%	33,3%	0,0184	2,56 (0,75-8,74)	0,133
Bacteriemia	42,4%	71,4%	0,0061	5,07 (1,4-18,37)	0,013
Antibiotics in the previous 3 months	26,6%	56,6%	0,0056	6,7 (2,04-22,01)	0,002

**Disclosure of Interests:** Pauline Richebé: None declared, Sophie Godot: None declared, Guillaume Coiffier: None declared, Pascal GUGGENBUHL: None declared, Denis Mulleman: None declared, Marion Couderc: None declared, Emmanuelle Darnis Speakers bureau: Lilly, Novartis, Valentine Deprez: None declared, Carine Salliot: None declared, Saik Urien: None declared, Rachel Brault: None declared, Adeline Ruyssen-Witrand Grant/research support from: Abbvie, Pfizer, Consultant of: Abbvie, BMS, Lilly, Mylan, Novartis, Pfizer, Sandoz, Sanofi-Genzyme, Emmanuel Hoppe: None declared, Jacques-Eric Gottenberg Grant/research support from: BMS, Pfizer, Consultant of: BMS, Sanofi-Genzyme, UCB, Speakers bureau: Abbvie, Eli Lilly and Co., Roche, Sanofi-Genzyme, UCB, Christian Roux: None declared, Sebastien Ottaviani: None declared, Maxime Breban: None declared, Marie Beaufre: None declared, Alexia Michaut: None declared, Loïc Pauvele: None declared, Christelle Darrieutort: None declared, Daniel Wendling: None declared, Pascal COQUERELLE: None declared, Géraldine Bart: None declared, Elisabeth Gervais: None declared, Vincent Goeb: None declared, Marc Ardizzone: None declared, Edouard Pertuiset: None declared, Sophie Derolez: None declared, Jean Marc Ziza: None declared, René-Marc Flipo Consultant of: Johnson and Johnson, MSD France, Novartis, Sanofi, Speakers bureau: Johnson and Johnson, MSD France, Novartis, Sanofi, Raphaële Seror Consultant of: BMS UCB Pfizer Roche  
DOI: 10.1136/annrheumdis-2020-eular.5817

FRI0450

### MEASURES OF DISEASE SEVERITY PREDICT DISABILITY AND QUALITY OF LIFE DIFFERENTLY IN RHEUMATOID ARTHRITIS AND CHRONIC CHIKUNGUNYA DISEASE

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**Background:** Chronic rheumatological manifestations similar to those of rheumatoid arthritis (RA) have been described after chikungunya virus infection. However, the clinical significance of the symptoms and disease severity in the two conditions has not been directly compared.

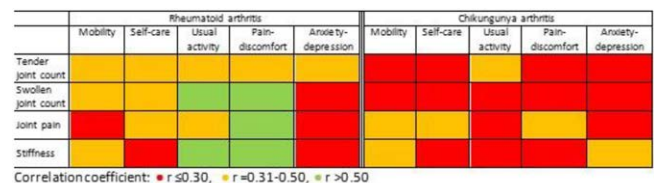
**Objectives:** To compare, using identical measures of disease severity and patient outcomes, the impact of disease severity measures and symptoms on outcomes in RA and chronic chikungunya disease.

**Methods:** Forty patients with chronic chikungunya arthralgia two years post-infection and 40 matched patients with RA were enrolled in Roraima, Brazil. Twenty-eight joints were assessed for tenderness and swelling, a pain intensity visual analogue scale, musculoskeletal stiffness questionnaire, modified Health Assessment Questionnaire and the EuroQol EQ5D-5L quality of life assessment were completed. The importance of the various measures of disease severity were analysed using Spearman's rank correlation and regression analysis.

**Results:** Tender and swollen joint counts, pain and stiffness were all predictive of the HAQ disability index in RA, but only stiffness was significantly associated with disability in chikungunya patients (Table 1). Tender and swollen joint counts, pain and stiffness were predictive for all EQ5D quality of life domains (except anxiety/depression) in RA patients. In contrast, in chikungunya disease, tender joint counts were predictive only of usual daily activities; pain was predictive of impaired mobility, self-care and discomfort, while stiffness was predictive for the mobility and anxiety/depression domains (Figure 1). Swollen joint counts were not associated with any of the patient outcomes in chikungunya disease. Linear regression analysis confirmed (p=0.003) that the effect of swollen joint count on the HAQ disability index depends on the underlying disease.

**Table 1. Association of disease severity with HAQ disability index in rheumatoid and CHIKV+ arthritis**

Severity measure	Rheumatoid arthritis		CHIKV+ arthritis	
	r	(p)	r	(p)
Tender joint count	0.56	(0.0002)	0.24	(0.14)
Swollen joint count	0.60	(<0.0001)	0.002	(0.99)
Joint pain (VAS)	0.55	(0.0002)	0.29	(0.07)
Stiffness severity	0.57	(0.0001)	0.38	(0.02)



**Figure 1.** Association of disease severity with quality of life domains in rheumatoid and CHIKV+ arthritis

**Conclusion:** The value of all the disease severity measures tested in RA were confirmed, but tender joint counts may have more limited value in the assessment of chronic chikungunya disease. Joint swelling appears to have little impact for chikungunya patients, while stiffness appears to be an important metric to quantify chikungunya arthritis disease severity.

**Disclosure of Interests:** Hugh Watson Shareholder of: Sanofi, Employee of: Sanofi, Ramão Luciano Nogueira-Hayd: None declared, Maony Rodrigues-Moreno: None declared, Felipe Naveca: None declared, Giulia Calusi: None declared, Richard Amdur: None declared, Karol Suchowicki: None declared, Gary S. Firestein: None declared, Gary Simon: None declared, Aileen Chang: None declared  
DOI: 10.1136/annrheumdis-2020-eular.577

FRIDAY, 05 JUNE 2020

### Basic and translational science in paediatric rheumatology

FRI0451

### RELATIONSHIP BETWEEN MEMBRANE-BOUND AND SOLUBLE RECEPTOR FOR ADVANCED GLYCATION END PRODUCTS AND DISEASE ACTIVITY IN JUVENILE IDIOPATHIC ARTHRITIS PATIENTS

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