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# SAT0567 IMPACT OF CHIKUNGUNYA FEVER ON FUNCTIONAL STATUS AND QUALITY OF LIFE – A PROSPECTIVE COHORT STUDY OF BRAZILIAN PATIENTS

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**Background:** An epidemic of Chikungunya Fever (CF) spread throughout South America in 2014. The acute manifestation of CF typically consists of febrile arthritis. The burden of the chronic articular manifestations remains a public health issue affecting activities of daily life. There is a very important impact on quality of life in patients affected by CF, even at chronic phase. The long-term functional status may also be affected by CF.

**Objectives:** To evaluate longitudinally the disability, Health Related Quality of Life (HRQOL) and functional status of patients with CF and analyze the clinical and epidemiological factors associated with different outcomes.

Methods: Patients with clinical and demographic diagnosis of CF and persistent articular symptoms were evaluated in a cohort study between May 2016 and December 2016. HRQOL was rated by Short-Form 12 (SF-12) and the functional status was checked through Health Assessment Questionnaire (HAQ) and the Global Functional Status (GFS). Data were divided per weeks after disease onset and were analysed (Spearmans's correlation coefficient and Mann-Whitney test). Results: Sixty-five patients (58 females), mean age of 51.3 (±13.3) were assessed. As expected, a significant correlation between pain related scores and Physical Health Composite Scale Score (PCS), HAQ and GFS was found (p<0.05)). Edema and morning stiffness correlated with PCS, HAQ and GFS status from 4 to 20 weeks after disease onset (p<0.05). There was improvement in scores of all instruments used from 4-8 weeks of disease to 12-16 weeks of disease (table 1). The worst indices of PCS, Mental Health Composite Scale Score (MCS) and GFS were scored in the first month, mean scores of 30.07±5.77, 38.13±8.54 and 3.15±1.07 respectively. Higher HAQ values were demonstrated between 4 and 8 weeks after disease onset (mean score 1.87±0.82).

HRQOL and Functional Status in patients with CF

	4–8 weeks of disease (mean score)	12–16 weeks of disease (mean score)	P value
PCS	30.12±8.21	35.86±11.11	0.0487
MCS	40.95±12.23	47.02±12.09	0.0326
HAQ	1.87±0.82	1.36±0.86	0.0228
Global Functional Status	3.03±0.98	2.53±0.95	0.0438

**Conclusions:** We demonstrated the impact of CF on HRQOL and Functional Status of patients. The SF-12 Health Survey, HAQ and GFS are influenced mostly by patients pain and worsening of this status are more prominent in the first 8 weeks of disease. Further clinical studies of the impact of CF on quality of life and functional studies are needed

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#### SAT0568 RHEUMATOLOGICAL MANIFESTATIONS IN A SERIES OF PATIENTS WITH CHIKUNGUNYA FEVER

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**Background:** Chikungunya fever is characterised by a high probability of persistent rheumatological manifestations, producing a negative impact in the work, social and economic fields.

**Objectives:** To determine the frequency and type of rheumatologic involvement in the subacute and chronic phase of Chikungunya fever.

Methods: Descriptive, cross-sectional study. We included patients>16 years old with Chikungunya infection (real time PCR, IgM or IgG for Chikungunya)

who consulted consecutively for rheumatic symptoms/signs from March 2015 to March 2016. According to the time of evolution, the disease was divided in 2 Phases: acute ( $\leq$ 10 days of duration) and subacute/chronic ( $\geq$ 11 days). According to clinical presentation, patients were classified in two groups: 1) non-autoimmune rheumatologic compromise (NARC) and 2) autoimmune rheumatologic compromise (ARC). Current ACR/EULAR criteria for classification of autoimmune diseases were used.

**Results:** Two hundred and two patients were evaluated, 80 were excluded due to negative serology for Chikungunya. 122 were included: 107 (88%) female, mean age 52.52±13.19 years, and time of evolution of 116.66±91.61 days.

Acute phase. 122 patients: fever 85 (69.67%), rash and pruritus 54 (44.26%), tenosynovitis 23 (18.8%), polyarthralgias 100 (82%) and arthritis 56 (45.90%).

*Chronic phase.* 122 patients: 71 (58%) patients had a chronic persistent rheumatologic symptoms and 51 (42%) presented remission of symptoms but all of them presented subsequent recurrence in an 91±40 days. NARC in 33 patients (27%) and ARC in 89 (73%), with no significant differences in age and time of evolution was observed.

NARC: 14 (42.4%) exacerbation of previous osteoarthritis pain, 9 (27.3%) developed fibromyalgia and 10 (30.3%) had localized soft tissue pain.

ARC: 13 (14.6%) with a history of RA, SLE, psoriasis or DM reactivated the underlying disease and 76 (85.4%) developed ARC: Undifferentiated polyarthritis with negative antibodies 61 (80%), RA with positive antibodies 5 (6.5%), scleroderma 2 (2.6%), cutaneous vasculitis 2 (2.6%), polymyalgia rheumatica 1 (1.3%), Sjogren's Syndrome 2 (2.6%), Dermatomyositis 1, Erythema nodosum 1 (1.3%).

Antibodies were requested according to clinical suspicion: FAN  $\geq$  320 in 5 patients, RF in 6, ACPA in 4 and anti RO in 1. Thyroid dysfunction was observed in 7 patients who had a previous normal thyroid profile.

	Acute Fase n 122 (%)	Chronic Fase n 122 (%)	р
Fever	85 (69,7)	0	0,01
Rash and pruritus	54 (44,2)	0	0,01
Tenosynovitis	23 (18,8)	41 (33,61)	NS
Polyarthralgias	100 (82)	83 (68,03)	NS
Arthritis	56 (45.9)	81 (66,39)	0,0005

**Conclusions:** The frequency of rheumatological manifestations post Chikungunya fever in our sample was high, and can trigger ARC. Patients presenting new immunological manifestations in an endemic area for Chikungunya fever should have a serologic test performed. This series of patients must be evaluated with long-term studies to define their evolution, under the possibility of developing definite autoimmune disease or remission.

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# SAT0569 OUTCOME OF PATIENTS WITH SYSTEMIC RHEUMATIC DISEASES ADMITTED IN INTENSIVE CARE UNIT: A PROGNOSTIC STUDY OF 98 PATIENTS

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**Background:** Systemic rheumatic diseases (SRD) are a rare and heterogeneous group of diseases, associated with a high mortality rate due to the natural evolution of the disease and/or consequences of their specific treatments (infections, toxicity).

Objectives: To describe the clinical features, outcomes and prognostic factors for patients with SRD admitted to the intensive care unit (ICU).

**Methods:** Single-center retrospective observational cohort study of 98 patients with SRD over an 11-year period in an ICU of a French teaching hospital.

Results: Ninety-eight patients (57% women; median age, 57 years [19-81years]) accounted for 108 admissions. Connective tissue disease (primarily systemic lupus erythematosus) and systemic vasculitides (mainly ANCA-associated vasculitides) represented respectively 55% and 30% of SRD. For nineteen patients, diagnosis of SRD was made at admission. Reasons for admission were: SRD exacerbations (43%), isolated infections (34%), SRD exacerbations associated with infections (12%) or other (11%). Respiratory failure was the most common organ dysfunction. Mechanical ventilation was necessary for 43 patients (44%), vasoactive drugs for 47 (48%) and extra-renal replacement therapy for 38 (39%). The ICU mortality rate was 30% and 37% one year after admission. Infection was the main cause of death (69%). The factors significantly associated with mortality in the ICU were (multivariate analysis): diabetes, cardiovascular diseases and immunosuppressive treatments on admission. At 1 year of follow-up, additional risk factors were: number of organ dysfunction at ICU admission and mechanical ventilation. It is to be noted that at 1 year of follow-up, diabetes was not anymore a prognostic factor. Conclusions: Patients with SRD admitted to the ICU have a severe prognosis. Causes of mortality are mainly infections. Our study points out the importance of vaccination and developing new therapeutic strategies. Diagnosis of SRD in the ICU is not rare and should be systematically considered on admission. Prognostic factors of mortality in the ICU were patient comorbidities and immunosuppressive