at two years in 30% of cases and progression in 25%; while, at the functional level, 40% remained stable with worsening in 4 patients per year (20%). 50% of the patients with SLE received treatment with HCQ and MTX before the diagnosis of ILD; and 35% corticosteroids (4 + 7.3 mg / day). With ILD diagnosed, HCQ was administered to 95% of patients and the standard of treatment was based on corticosteroids in monotherapy at a mean dose of 13 ± 10.5 mg / day due to stability both at radiological level and in function tests respiratory. 25% and 15% required treatments such as RTX and BLM as they did not have an adequate response with the previous one.

In our study, we did not find any statistical significance between the variables analyzed, due to the small sample size.

Conclusion: 1)ILD in SLE is a rare manifestation, present in 4.4% of our series. Standard treatment with hydroxychloroquine and corticosteroids appears to be a useful therapeutic option, stabilizing radiological progression in one third of cases early. More studies with a larger sample size are needed to analyze the role of immunosuppressive treatment in this type of lung involvement.

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AB0291

PROGNOSTIC VALUE OF LATE GADOLINIUM ENHANCEMENT ON CARDIAC MAGNETIC RESONANCE IMAGING IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Cardiac Magnetic Resonance Imaging (CMRI) with Late Gadolinium Enhancement (LGE) has an established value in the diagnostic and prognostic assessment of ischaemic and non-ischaemic cardiomyopathies. Although CMRI is widely used for the detection of myocardial involvement in subclinical Systemic Lupus Erythematosus (SLE), its prognostic value has not been determined.

Objectives: To determine the prognostic value of CMRI with LGE for major adverse cardiovascular events (MACE) in patients with SLE, and investigate its correlation with the severity of systemic inflammation.

Methods: A retrospective tertiary single-centre review of patients with SLE who underwent a CMRI study at Manchester Foundation Trust between 2009-2020 was conducted. Patients were categorized into two groups; those who experienced a MACE (cardiac death, myocardial infarction (MI), stroke/TIA or heart failure) and those who did not. We compared cardiovascular (CV) risk factors, CMRI findings, SLE risk scores and biochemistry between the 2 groups.

Results: We identified 20 female patients who underwent a CMRI, with a mean age of 46 years at the time of the scan. Indications for CMRI were assessment for worsening dyspnoea and new onset left ventricular systolic dysfunction. Table 1 demonstrates the clinical, laboratory and CMRI characteristics of the two groups. There were no significant differences in the clinical background and traditional CV risk factors between the 2 groups. 5/20 (25%) patients experienced a MACE. The SLEDAI-2K score was >12 in 2/5 (40%) of patients who suffered a MACE and they presented with a stroke within a year of CMRI study, suggesting that systemic inflammation contributes to poor vascular outcomes. 3/5 (60%) patients who reported a MACE demonstrated LGE on their CMRI study compared to 3/15 (20%) of those who did not ($p=0.045$). The LGE was predominantly diffuse, mid myocardial in distribution and not ischaemic in pattern, signifying a complex pathophysiological substrate in the development of myocardial pathology in SLE. Additionally, an increase in left ventricular end-diastolic, end-systolic volumes and left atrial diameter was noted in patients who had a MACE ($p<0.05$). Patients who had a MACE showed a higher incidence of valvular abnormalities and pericardial disease in their CMRI studies. On looking at the medications around the CMRI, the majority of MACE positive patients 4/5 (80%) were on conventional Disease Modifying Anti-Rheumatic Drugs (DMARDs) such as Mycophenolate, Tacrolimus, Cyclophosphamide, Methotrexate or hydroxychloroquine and none on biologics like Rituximab or Belimumab. While 9/15 of the MACE negative patients were on DMARDs and 4/15 were on biologics.

Table 1. clinical, laboratory and CMRI characteristics of SLE patients with and without MACE. LVEDV-left ventricular end-diastolic volume, LVESV-left ventricular end-systolic volume, LA-left atrial, LVEF-Left ventricular ejection fraction, SLEDAI- SLE Disease Activity Index, +ve-positive.

	MACE+ (n = 5)	MACE- (n = 15)
Mean age of SLE diagnosis (years)	35.6	34.4
Mean duration to CMRI (years)	8.8	11.71
Lupus nephritis	20%	20%
Raynaud's	40%	27%
Previous CV involvement	0	2
SLEDAI-2K > 12	2(40%)	11(73%)
Lupus anticoagulant +ve	20%	27%
Anticardiolipin +ve	2(40%)	2(14%)
anti-dsDNA (iu/ml)+ve	3(60%)	6(40%)
Low C3 (g/L)	2(40%)	6(40%)
Mean prednisolone dose	28.33	8.21
Conventional DMARDs	4/5(80%)	9/15(60%)
Biologics	0/5	4/15
Mean LVEF (%)	47.4	56.7
CMR LGE	3(60%)	3(20%)
Valvular abnormalities	2(40%)	4(27%)
Mean LA area (cm ²)	29.6	20.6
Pericardial effusion	40%	27%

Conclusion: In our small SLE cohort, we add to existing knowledge that CMRI with LGE is an indispensable tool to investigate cardiac involvement in SLE and may indeed add important prognostic information. Larger scaled studies are required to confirm the use of CMRI with LGE as a predictor of MACE in patients with SLE.

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AB0292

A RETROSPECTIVE STUDY OF PERIOPERATIVE MANAGEMENT OF PATIENTS WITH SLE IN TOTAL HIP ARTHROPLASTY

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Background: Aseptic necrosis (AN) of bones is one of the most serious complications of systemic lupus erythematosus (SLE), which is characterized by multicomponent joint damage mainly in young people. Long-term observations show that two thirds of patients have multiple aseptic necrosis of bones, with the femoral head being most often affected. Obviously, caused by much strain on the hip joint. In this regard, total hip arthroplasty (THA) is an integral part of the treatment of SLE patients. Despite the fact that THA in these patients allows to achieve good functional outcomes, the amount of complications remains high.

Objectives: To retrospectively analyze the outcomes and structure of complications to determine the tactics of perioperative management of patients with SLE.

Methods: The retrospective group included patients over 18 years of age with a reliable diagnosis of SLE, established according to the classification criteria (SLICC, 2012, ACR, 1997). 123 THA were performed in 77 patients. Outcomes and the structure of complications were analyzed for the period from 1998 to 2016 inclusive.

Results: The period of hospital stay of patients was analyzed. Cementless fixation of the components of the endoprosthesis was used and the friction pair was metal-polyethylenel in all cases. In 23 patients, additional fixation of the acetabular component with screws was performed, which indirectly indicates a poor quality of bone tissue. A more detailed analysis of these patients revealed a long period of glucocorticoid therapy (from 1.5 to 35 years). In 3 patients, during preparation for implantation of the femoral component, a femoral fracture occurred, which required using the cerclages. One patient also had a fracture of the acetabulum, which required the implantation of a Müller anti-protrusion ring. The above-described technical features led to increasing of the total time of surgery, which significantly increased the volume of blood loss. Thus, this required transfusions of blood components: fresh frozen plasma (FFP), erythrocyte suspension, as well as replenishment the circulating blood volume with colloidal solutions.

Prevention of thromboembolism. All patients in the postoperative period underwent common measures of prevention of venous thromboembolism.

The drugs of choice were calcium nadroparin (Fraxiparin) 0.3 or 0.6 ml subcutaneously - depending on body weight, respectively, or Dabigatran etexilate (Pradaxa) 220 mg per day, or rivaroxaban (Xarelto) 10 mg per day.

Prevention of infectious complications. The first injection of antibiotic is carried out immediately before surgery achieve its maximum concentration in blood plasma just in the time of first incision. In the postoperative period, antibiotic therapy was carried out for at least 5 days. In 1 patient, the course of antibiotic therapy was prolonged and another broad-spectrum antibiotic was added due to a history of tuberculosis infection. Postoperative rehabilitation in patients with SLE met standard protocols: activation in bed and verticalization was carried out on day 1, standing with crutches and walking on day 2.

Conclusion: During the period of hospital stay in the early postoperative period, not a single one thromboembolic event developed, as well as no cases of infectious complication occurred. There was one case of dislocation of the femoral component of the endoprosthesis, which was immediately repaired in the early postoperative period.

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AB0293

IDENTIFYING PREDICTORS OF SHORT-TERM RESPONSE TO RITUXIMAB IN PRIMARY SJOGREN'S SYNDROME

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Background: Randomised controlled trials of rituximab (RTX) in primary Sjogren's syndrome (pSS) have aimed to alleviate glandular symptoms and fatigue with only limited data on efficacy/effectiveness of the initial and repeat cycles of RTX on extra-glandular pSS.

Objectives: To assess the effectiveness of RTX on extra-glandular symptoms and identify predictors of short-term response with a view to personalised B-cell depleting therapy in patients with pSS.

Methods: An observational study was conducted in 40 consecutive RTX-treated pSS patients in a single centre for over 15 years. All patients fulfilled the 2002 AEG criteria and were CCP negative. Clinical response at 6 months was defined as ≥ 3 reduction of ESSDAI from baseline. B-cell subsets were measured using highly sensitive flow cytometry. Predictors of short-term response were analysed using penalised logistic regression.

Results: 38/40 (95%) patients were female, mean (SD) Age 54 (13.7) years, median (IQR) disease duration 5 (2-9) years, 39/40 (98%) had positive ANA, 26/40 (65%) were on concomitant immunosuppressant (IS). Mean (SD) ESSDAI at RTX initiation was 11.5 (6.7); main domains for RTX were articular (73%), skin (23%), PNS (15%) and muscular (15%). 169 RTX cycles were administered with a total follow-up of 165PY. In Cycle 1 (C1) RTX, the proportion of patient achieving ESSDAI response from baseline was 29/40 (73%; 95% CI 58-87). There were significant reductions in ESSDAI, daily prednisolone dose and IgG levels at 6 months (all $p < 0.05$). Of C1 responders, 23/29 received retreatment on clinical relapse; of which 8/23 (35%) lost response [secondary non-depletion non response (2NDNR) associated with anti-RTX antibodies=4 (17%) as we previously observed in SLE[1], side effects=2, ineffective=2]. Of C1 non-responders, 9/11 were retreated but only 2/9 responded in C2. Overall, 13/40 (33%) discontinued RTX within two cycles. In multivariable analysis, concomitant IS and achieving complete B-cell depletion in C1 reduced non-response to RTX (Table 1).

Conclusion: All pSS patients should be prescribed concomitant immunosuppressant with RTX and therapy should aim to achieve complete depletion. About 1 in 6 pSS patients lose response in repeat cycles which is associated with 2NDNR phenomenon. The use of humanised or type 2 anti-CD20mAbs should overcome these issues and improve the clinical response of extra-glandular pSS.

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Table 1. MVA logistic regression of risk factors for RTX non-response

Predictors	Continued Response (N=27)	Non-response within 2 RTX Cycles (N=13)	Univariable OR (95% CI); p-value	Multivariable OR (95% CI); p-value
Age, mean (SD) per 10 years	55 (14)	52 (12)	0.87 (0.53-1.41); 0.572	Excluded from final model
Disease duration, median (IQR)	5 (2-9)	6 (3-9)	0.97 (0.87-1.08); 0.565	Excluded from final model
Concomitant IS, %	81.5%	30.8%	0.10 (0.02-0.46); 0.003	0.07 (0.01-0.52); 0.010
IgG, mean (SD), g/L	15.5 (6.3)	18.4 (5.8)	1.08 (0.97-1.20); 0.175	1.13 (0.97-1.32); 0.116
Clinical ESSDAI, median (IQR)	10 (6-16)	8 (6-10)	0.96 (0.85-1.08); 0.487	0.91 (0.79-1.05); 0.185
Baseline Plasmablast (x1000), 10 ³ cells/L, median (IQR)	2.6 (1-5.2)	2.3 (1.6-9.5)	1.00 (0.94-1.07); 0.885	Excluded from final model
Complete B-cell depletion post-RTX, %	55.6%	8.5%	0.07 (0.01-0.64); 0.018	0.04 (0.02-0.82); 0.036

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AB0294

PREDICTORS OF CHLOROQUINE AND DERIVATES TREATMENT INVOLVING OCULAR TOXICITY: RESULTS FROM A COHORT

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Background: Chloroquine (CQ) and hydroxychloroquine (HCQ) have been employed in a huge range of indications, from autoimmune diseases (such as rheumatoid arthritis [RA], cutaneous lupus or systemic erythematosus lupus [SLE]) to infectious ones (as malaria or helminthiasis).¹ A newer purpose came upon the new coronavirus disease 2019 (COVID-19), where they seem to be effective modulating immune response. Controversial results have been published from clinical and observational data concerning its effectiveness.² Ocular toxicity have been described as a serious adverse event of these anti-malarial drugs and screening protocols have been displayed for its prevention.³

Objectives: To evaluate CQ/HCQ ocular toxicity and to identify potential predictors of appearance. Also to assess screening protocols compliance.

Methods: Demographic, diagnostic and treatment data were collected from patients under CQ or HCQ treatment in the Clinical University Hospital in Santiago de Compostela (Spain) during the first wave of the COVID-19 pandemic (January to April 2020).

Univariable logistic regression was performed to identify potential predictors of maculopathy. Variables with $p < 0.20$ were selected for multivariable testing. Stata 15.1 was used to perform statistical analysis.

Results: 503 patients taking CQ/HCQ were identified. 495 were women. Most frequent diagnosis were SLE (48.28%), cutaneous lupus (22.85%) and rheumatoid arthritis (RA, 12.54%). Mean age at diagnosis was 44.99 years (SD 17.88). 93.33% of patients were under treatment with HCQ. Mean age at beginning of CQ/HCQ treatment was 48.10 years (SD 17.79) and mean time between diagnosis and CQ/HCQ onset was 2.03 years (SD 5.50). Mean maximum HCQ dosage per patient was 3.83 mg/kg (SD 1.59; 252.57 mg per day, SD 89.98) and CQ was 3.24 mg/kg (SD 1.91; 219.49 mg per day, SD 103.90). Mean time under CQ/HCQ treatment was 6.39 years (SD 5.63). 20 patients developed maculopathy. Mean time between CQ/HCQ onset and maculopathy appearance was 2.67 years (SD 3.10). Only 25 patients did not complete ophthalmologic exams for maculopathy screening. After univariable analysis, higher age at diagnosis and age at beginning of CQ/HCQ treatment were identified as potential predictors of maculopathy ($p < 0.20$). After multivariable analysis, both higher age at diagnosis and higher age at CQ/HCQ onset were identified as predictors for suffering maculopathy under treatment with CQ/HCQ (OR 1.06 [CI95% 1.03-1.10] $p = 0.000$ and OR 1.09 [CI95% 1.02-1.16] $p = 0.008$, respectively).