significantly higher values of the SLEDAI score in SLE subgroup with retinopathy were found. Data obtained also demonstrated that retinal changes of SLE may be significantly more frequent in SLE with arthritis and with increased DNA binding.

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FRI0109 SURVIVAL AND PREDICTOR VARIABLES FOR MORTALITY IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background Survival of systemic lupus erythematosus (SLE) patients has improved significantly over time because of recognition of mild disease and better approaches to therapy. The identification of predictor variables for mortality is necessary to identify subgroups at greater risks to die and who need more aggressive therapy.

Objectives To analyse survival and mortality risks of various clinical variables in a cohort of SLE patients, followed prospectively in a single centre.

Methods The survival of a cohort of 509 SLE patients, SLE followed over a 20-year period according to a standard protocol was studied using the Kaplan Meier lifetable analysis methods. Univariate associations between clinical and laboratory information and drugs used were calculated. The Cox proportional hazard regression model was used to estimate risk ratio of death and to examine the simultaneous effects of multiple prognostic factors.

Results Over the duration of follow-up of 20 years, 58 (11.4%) died. The survival rate was 97% at 1 year, 90% at 5 years, 81% at 10 years and 75% at 20 years. Age <16 years at diagnosis, hypertension, weight loss, nephritis, ocular involvement, the presence of anti DNA antibodies, the absence of arthralgia/arthritis and frequent infections were significantly associated with reduced survival in univariate analysis. Using multivariate analysis, hypertension (OR 2.2, 95% CI 1.1–4.5), age <16 years at diagnosis (OR 2.6, 95% CI 1.4–5.0), ocular involvement (OR 4.9, 95% CI 1.9–12.8), treatment without antimalarial drugs (OR 2.8, 95% CI 0.15–0.53) and frequent infections (OR 2.3, 95% CI 1.3–4.1) were independent risk factors associated with increased mortality.

Conclusion Hypertension, age <16 years at diagnosis, ocular involvement, treatment without antimalarial drugs and frequent infections were independent risk factors associated with increased mortality.

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FRI0110 BOWEL PERFORATION IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background

Objectives Bowel perforation is a rare but serious complication in SLE. Although several processes not related to SLE (diverticulitis, tumours) may be the cause of this complication, it has been previously considered to be associated to small-vessel vasculitis in active lupus disease. Nowadays, a vascular damage induced by antiphospholipid antibodies (aPL) and steroids seems to play an important role.

Methods Seven patients with intestinal perforation were observed in 220 SLE patients during a period of 26 years (1974–2000). In all cases, the diagnosis of intestinal perforation was confirmed by surgery or autopsy and pathological examination.

Results All patients were females, with a mean age at the diagnoses of bowel perforation of 45 years, and a mean time of SLE evolution of 13 years. The site of perforation was in the colon in 4 patients and in the small bowel in the other 3. Six patients had lupus nephropathy, one of them with renal transplantation. Central nervous system and cutaneous involvement was observed in 4 patients and Sjögren's syndrome, Libman-Sachs endocarditis and haemolytic anaemia in two patients. aPL were present in 5 patients. All patients were on steroid therapy at the moment of the intestinal perforation. Abdominal pain was present in all cases but the mean time of diagnosis delay was 11 days. Two patients died from peritonitis and septic shock. A local cause of perforation was found in four patients: diverticulitis (3) and adenocarcinoma of the rectum (1). Necrotizing vasculitis was not observed in any case of pathological examinations.

Conclusion Bowel perforation, although uncommon in SLE, has to be taken into account as a differential diagnosis in a patient with abdominal pain. Disease severity, antiphospholipid antibodies and previous steroid therapy are important risk factors for this complication.

FRI0111 PULSE METHYLPREDNISOLONE AND CYCLOPHOSPHAMIDE THERAPY IN THREE SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS WITH BRONCHIOLITIS OBLITERANS ORGANISING PNEUMONIA AS THE INITIAL MANIFESTATION

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Background Diverse pleuropulmonary manifestations are common in patients with systemic lupus erythematosus (SLE). Bronchiolitis obliterans organising pneumonia (BOOP) is a pathologic entity characterised by the formation of fibrous tissue plugs within terminal bronchioles and alveolar ducts. Although BOOP has been associated with several connective tissue disorders, there are rare reports of BOOP in patients of SLE as the initial manifestation.

Objectives We describe three SLE patients with open lung biopsy-proved BOOP as the initial manifestation. All three cases presented with fever, cough and dyspnea. Chest radiographs and CT scan of lung revealed bilateral pulmonary infiltrates. BOOP was confirmed by open lung-biopsy. Pulmonary vasculitis was also demonstrated in lung histopathology in one case.

Methods

Results The pulmonary lesions and respiratory illnesses responded well to pulse intravenous methylprednisolone and cyclophosphamide therapy.

Abstract FRI0111 Table 1

	Case 1	Case 2	Case 3
Sex	Female	Male	Male
Age	43	56	47
ANA	Positive, speckled	Positive, homogeneous	Positive, homogeneous
anti-ENA	SS-A, SS-B	Negative	Negative
anti-dsDNA	Negative	Positive	Positive

Conclusion

FRI0112 INTRAVENOUS PULSE CYCLOPHOSPHAMIDE FOR LUPUS NEPHRITIS: PREDICTORS OF REMISSION

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Background Renal involvement in SLE is a common disease manifestation and a strong predictor of poor outcome. The general consensus is that 50% of lupus patients will develop clinically relevant nephritis at some time in the course of their illness. Cyclophosphamide is considered the most effective cytotoxic in the management of lupus renal disease. When used intravenously, cyclophosphamide is less toxic. The risk of haemorrhagic cystitis and permanent gonadal failure with infertility is greater in patients treated with oral cyclophosphamide. Long-term intravenous cyclophosphamide in combination with corticosteroids is the standard therapy for lupus nephritis.

Objectives The aim of this study was to evaluate the long-term remission rates; predictors of relapse, and the ability to achieve a second remission with currently recommended regimens.

Methods A cohort of 14 patients (1 male and 13 female) are enrolled into the trial. Mean age is 31.4 years (s.d = 11.9) and median time from diagnosis of SLE is 2 years. The disease severity was evaluated clinically by urinalysis, 24-hour urine protein, hematuria and casts, serum creatinine, and serum complement. We have followed up the patients for a period of 24 months, till now.

Results The median time to remission was 9 months. From all patients only 4 have relapsed. 3 of them had 24 h proteinuria > 3 g before treatment. Time to re-remission not evaluated yet. All patients who relapsed are still under treatment.

Conclusion A high amount of proteinuria seems to be an adverse predictor of remission. The time to remission was longer in patients with high value of 24 h proteinuria. Our data suggest that a long time to remission is a predictor of earlier relapse. Prolonged courses with cyclophosphamide were needed to achieve remission in many first-treated patients. No data about the duration of treatment in patients who relapsed. No serious toxicity was observed during this study.

FRI0113 A STUDY OF A COHORT OF LUPUS PATIENTS WITH ACUTE GASTROINTESTINAL MANIFESTATIONS OF ACTIVE DISEASE

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Background Gastrointestinal symptoms occur commonly in SLE, but vasculitis of the bowel or SLE related gut disease (lupus gut) have previously been described to be of low incidence. These reports have usually been based on cases admitted with acute abdomen, associated with high mortality. Our experience in Singapore suggests that a milder form of this entity may manifest as acute gastrointestinal symptoms.

Objectives To study the clinical characteristics, management and outcome of SLE patients admitted with acute gastrointestinal symptoms and treated as lupus gut after exclusion of infection or other aetiology.

Methods The case notes of 20 SLE patients admitted for acute gastrointestinal symptoms and treated as lupus gut were reviewed. All patients satisfied the ACR criteria. We defined lupus gut as patients presenting with abdominal pain, vomiting and/or diarrhoea with raised double stranded DNA or hypocomplementemia and whose gastrointestinal symptoms responded to parenteral corticosteroids, increased oral corticosteroids or immunosuppressants. SLEDAI scores were also performed for disease activity.

Results All our patients were females and most were Chinese (95%). The mean age at presentation was 35.7 (13–56 years) and mean duration of SLE to their admission for lupus gut was 6.7 years (1–15 years). Most patients presented with abdominal pain (90%), diarrhoea (75%) and vomiting (70%). Abdominal tenderness was a frequent finding (70%) and 25% were febrile. Double stranded DNA was raised in all 17 patients who had this investigation performed and 75% had hypocomplementemia. Blood and stool cultures were carried out in 55% and 60% of patients respectively and all were negative. The mean SLEDAI score was 5.3 (0–12). Intravenous drip was commenced in 75% of patients with resting of gut and 80% received intravenous hydrocortisone. Intravenous methylprednisolone was administered to 5 patients (25%), 4 of whom had not responded to initial intravenous hydrocortisone. The majority (75%) had a good outcome with resolution of their abdominal symptoms, discharged well from hospital including 1 patient who underwent a laparotomy and was found to have patchy ischemic small bowel. Lupus gut recurred in 4 (20%) patients on subsequent follow up (mean follow up 31.4 months) and all 4 again responded to similar therapy. Three patients died within 4 months of their admission, 2 of whom had developed active nephritis 1 month prior to their death.

Conclusion Our study suggests that SLE related gut disease may occur in milder forms more commonly than previously described. Symptoms are associated with markers of active disease and respond to conventional treatment for SLE and resting of gut.

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