Conclusions: Therefore, the preliminary results show good tolerability and efficacy of inactivated split-virus influenza vaccine in RA, AS, and SS patients. Future studies on larger patients’ populations are warranted for more complete evaluation of vaccine safety and efficacy.

Disclosure of Interest: None declared

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SAT0396

THE RISK FACTORS OF SERIOUS INFECTION IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Although life expectancy has improved for many rheumatoid arthritis (RA) patients, serious infection is one of the major causes of mortality. Undernutrition is widely known to be a risk factor for infection; however, the association between undernutrition and infection in RA patients is not well known.

Objectives: The aim of this study was to identify the risk factors associated with infection requiring hospitalisation in RA patients.

Methods: We retrospectively analysed data obtained from 74 patients with RA (male, n=21; female, n=53; age 74.7±12.6), who were admitted to our hospital between 2016 and 2017 for infection (infection group). Among the patients who experienced multiple infections during this time, only the first infection was included in this study. We also recruited control RA patients (n=222) who were matched for age, gender and disease duration, with a match ratio of 1:3 (non-infection group). The BMI (20.9±4.1 vs. 22.0±3.4, p=0.036), Alb (3.3±0.7 vs. 3.9±0.4 g/dL, p<0.001), and PNI (55.4±8.0 vs. 60.4±8.0, p<0.001) values were significantly higher in the infection group. In addition, the DAS 28-ESR (3.5±1.2 vs. 2.9±1.5 g/dL, p<0.001), and PNI (55.4±8.0 vs. 60.4±8.0, p<0.001) values were significantly lower in the infection group. In addition, the CONUT score (odds ratio [OR], 62.9; 95% credible interval [Cr], 7.9 to 500.0) was lower in the infection group. The multiple regression analysis revealed that the CONUT score (odds ratio [OR], 62.9; 95% credible interval [Cr], 7.9 to 500.0) was a significant risk factor for serious infection.

Conclusions: Multiple factors were found to be associated with infection in RA patients. The improvement of nutrition may have a beneficial effect with regard to the prevention of infection during the care of RA patients.

Disclosure of Interest: None declared

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SAT0397

SAFETY AND IMMUNOGENICITY OF 23-VALENT PNEUMOCOCCAL VACCINE IN SLE PATIENTS

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Background: Immunisation with pneumococcal vaccine is the key prophylactic measure to protect patients with systemic lupus erythematosus (SLE) against severe respiratory infections.

Objectives: To study the efficacy and immunogenicity of 23-valent polysaccharide pneumococcal vaccine in SLE pts.

Methods: The study included 30 SLE pts, 27 females, 3 males, aged 19–62 y, the follow up (FUP) was 12 mo. Disease activity at vaccination was high – in 1 patient, moderate – in 4 pts, and low – in 20 pts; drug-induced remission – in 5. Therapy: 29 pts were on glucocorticoids (GCs), 23 – on hydroxychloroquine, 14 – on cytotistic (CS) drugs, 9 – on biologic diseases modifying anti rheumatic drugs (bDMARDs): 4 – on rituximab, and 5 – on belimumab. One dose (0.5 mL) of 23-valent polysaccharide pneumococcal vaccine was administered subcutaneously.

Conclusions: Obtained results demonstrate the safety and immunogenicity of 23-valent pneumococcal vaccine in SLE patients during one year FUP. The negative effect of bDMARDs on post-vaccination response was noticed. Future studies of vaccine efficacy and safety are needed in larger SLE populations.

Disclosure of Interest: None declared


SAT0398

SPINE IMMOBILISATION AND NEUROLOGICAL COMPLICATIONS IN VERTEBRAL OSTEOMYELITIS: RESULTS FROM A MULTICENTER PROSPECTIVE STUDY

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Background: Neurological complications of vertebral osteomyelitis (VO) can be serious. In a previous work,1 we showed that they occurred in up to 40% of the
patients. Bed rest and spine immobilisation by bracing is prescribed to decrease pain but also to prevent those complications. There is currently no consensus about the best VO-association treatments to follow in VO. French guidelines recommend bracing for all patients whereas recently published American recommendations did not even mention spine immobilisation.

**Objectives:** To describe the type and duration of prescription of spine immobilisation during VO.

**Methods:** A prospective multicenter study was performed in 7 French centres. All patients referred to VO were followed prospectively for neurological complications, imaging findings, type and duration of immobilisation were reported. We present here the data of our study after 3 months of follow-up.

**Results:** To date, 79 patients completed 3 months follow-up. Medium age was 67±15 years old with 66% of males. Medium duration of symptoms before diagnosis was 27 days, IQR 12–39. 37% of patients had an abnormal neurological exam at baseline: 18 patients (23%) had minor neurological signs (sensory loss, radiculopathy or pyramidal syndrome), and 10 (12%) had major neurological signs (motor deficit or cauda equine syndrome). During hospital stay, 5 patient developed major neurological signs (median 5 days after diagnosis) and 7 minor neurological signs (median 6 days after diagnosis). Half of the patients with abnormal neurological exam at baseline had functional sequelae at 3 months. On MRI, 17% of patients had epidural phlegmasia, 20% had anterior effacement of subarachnoidal space, and 16% had involvement of cervical spine. All these MRI signs were significantly associated with major neurological complications (p=0.004, p=0.004 and p=0.002, respectively). Median duration of bed rest was 9 days (IQR 7–18). Overall, only 60% of patients have been immobilised by bracing (80% of rigid bracing). Median duration of prescription was 8 weeks, IQR 6–12. Patients who did not receive spine immobilisation had a lot of lumbar involvement, a normal neurological examination at baseline. None of them developed secondary neurological complications. They were no significant difference in age (72±16 versus 65±15 years old), sex or duration of the symptoms between patients who have been immobilised or not.

**Conclusions:** Neurological complications occurred in 35% of our patients as published in previous VO cohort. Interestingly, 40% of our patients were not treated with bracing. They all had lumbar involvement and normal initial neurological examination. None of them developed secondary neurological complications. Bed rest without bracing might be the best therapeutic option for these patients, preventing the morbidity associated with bracing.

**REFERENCES:**

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**SAT0400 INFEKTIOUS SPONDYLODISCTIS: 7-YEAR ANALYSIS OF CLINICAL AND PROGNOSTIC VARIABLES IN A TERTIARY HOSPITAL**

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**Background:** Spondylodiscitis is an infectious disease of the vertebral body and intervertebral space, the early diagnosis and treatment are essential to give the patient the best chance of a good outcome, but these are often delayed because it tends to present nonspecific manifestations. 

**Objectives:** To analyse cases of Spondylodiscitis and identify poor prognosis variables.

**Methods:** A retrospective observational study, included all adult patients with confirmed infectious spondylodiscitis between January 2010 and December 2017. Demographic features, concurrent disease, clinical history, laboratory findings, microbiological diagnosis, radiological data and clinical outcome were compiled from the medical history management software. Statistical analysis was performed with the software R (version 3.3.2).

**Results:** We included 87 patients with a mean age of 62.05 (16.94) years old. Males predominated (69%). Almost 31% patients presented of a level of immunosuppression (immunosuppression treatment, cirrhosis, HIV infection, solid organ transplantation). The average time with axial pain was 74 (67.65) days. Mean length of hospital stay was 34.24 (34.3) days and readmission rate was 34.9%. Most of patients showed high CRP levels at their admission, with an average value of 88.92 (84.58) mg/L, it was not correlated with worse prognosis. Underlying endocarditis proportion was 11.5%, Blood cultures were positive in 29 patients (33.3%), it was correlated with hospital stay (p=0.03). 51 patients had pustulitis aspiration and intervertebral biopsy with microbiologic findings diagnosis in 30 patients (p=0.8%): 42.5% patients had an identifiable gram + bacteria (37.8% Streptococcus genere), 13.7% a Gram- bacteria, Mycobacterium tuberculosis in 8% and fungi infection (all Candida spp.) in 3.4%. 38% of patients showed vertebral destruction on MRI; 17.4% cord compression and developed neurological complications (8 of them paraparesis). 18.4% of patients required further surgical procedures. Furthermore, vertebral destruction was statistically correlated with epidural abscess (p=0.006). Almost 6% patients died in the following year after diagnostic.

**Conclusions:** Delay in diagnosis is an important issue in Spondylodiscitis patients. Higher complications rates are mainly in relation to greater vertebral destruction. Underlying infectious endocarditis was described in a small proportion of patients in contrast to other studies. Presence of epidural abscess was also...