Enterococcus faecalis (39%) then *Staphylococcus aureus* (17%) against 14% and 13% respectively in the entire IE Duke + group. In the group with cardiac PET-CT fixation, OAF was found in 10 patients (40%), 70% of whom were asymptomatic. Among them, there were 5 spondylodiscitis (2 cervico-thoracic and 3 exclusively thoracic), 2 glenohumeral arthritis (20%), 2 coxofemoral arthritis and 1 sternoclavicular arthritis. The IE affected the aortic valve in 60% of the cases, mitral in 30% of the cases and it was an infection on ICD in 10% of the cases. The main germs found were *Enterococcus faecalis* (30% of cases) and *Staphylococcus epidermidis* (20% of cases).

Conclusion: In patients with IE, PET-CT seems to be interesting in detection of osteoarticular infections, and consequently, could impact the diagnosis and the treatment modalities. In our cohort, 1 patient in 5 had an OAF and nearly 40% of them were asymptomatic. The overrepresentation of enterococcus is consistent with recent data in the literature

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FRI0440 RISK FACTORS FOR CYTOMEGALOVIRUS INFECTION IN PATIENTS WITH AUTOIMMUNE DISEASES

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Background: The risk for opportunistic infections in patients with autoimmune diseases requiring intensive immunosuppressive therapy is high and cytomegalovirus (CMV) infection is one of the most common opportunistic infections. Since 2011, we have performed weekly CMV pp65 antigen testing for patients at risk of opportunistic infections owing to autoimmune diseases to ensure appropriate patient management.

Objectives: To evaluate the risk factors that predict CMV infection in patients that received remission-induction therapy for autoimmune diseases.

Methods: We enrolled 254 patients (93 male, 161 female) from our hospital with autoimmune disease and who received remission-induction therapy with prednisolone at a dose greater than 0.5 mg/kg/day between January 2011 and December 2018. We retrospectively analysed their clinical characteristics and laboratory data, including treatment regimens and CMV pp65 antigen test results. The presence of more than five CMV pp65 antigen-positive cells over two slides was considered a positive result. We conducted univariate and multivariate analyses to extract CMV risk factors.

Results: Of the patients we evaluated, 60 suffered from systemic lupus erythematosus (SLE), 55 from anti-nucleolar cytoplasmic antibody-associated vasculitis (AAV), 31 from dermatomyositis (DM), 14 from interstitial pneumonia with anti-aminoacyl tRNA synthetase antibody, 14 from adult-onset Still's disease (AOSD), 14 from rheumatoid arthritis (RA), 11 from mixed connective tissue disease (MCTD), 10 from Takayasu's aortitis, and 45 suffered from other autoimmune diseases. Pulse therapy with methylprednisolone (mPSL) and immunosuppressive reagents were administered to 103 (40.6 %) and 97 (38.2 %), respectively. The median follow-up period was 61.0 days, and 66 patients became CMV pp65 antigen-positive during this period (SLE, 15; DM, 14; AAV, 9; AOSD, 8; and other, 20). Univariate analysis revealed that when compared to patients testing negative for the CMV pp65 antigen patients testing positive had lower total lymphocyte count (TLC) (825 /uL vs. 1220 /uL; $p < 0.01$), a lower serum albumin level (2.70 g/dL vs. 3.30 g/dL; $p < 0.01$), a higher HbA1c level (6.3 % vs. 5.9 %; $p < 0.01$), and were older (66.0 vs. 59.5 year old; $p < 0.01$). Forty-nine of the 66 patients in the positive group received mPSL pulse therapy ($p < 0.01$), and 38 received immunosuppressive reagents ($p < 0.01$). Logistic regression analyses indicated that a higher age by decade (OR; 1.46 [95%CI 1.06 - 2.00]), a lower TLC per 100/uL (OR; 0.83 [95%CI 0.73 - 0.94]), a higher HbA1c level per 1% (OR; 2.37 [95%CI 1.25-4.53]), and mPSL pulse therapy (OR; 3.92 [95%CI 1.33-11.5]) were risk factors for CMV pp65 antigen positivity.

Conclusion: Higher age, lower TLC, higher HbA1c, and treatment with mPSL pulse therapy were risk factors for acquiring CMV infection, as measured by the presence of the CMV pp65 antigen, in patients receiving remission-induction therapy for autoimmune diseases. Careful monitoring of these, at risk, patients is necessary.

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FRI0441 INFECTIOUS DISEASES RISK ASSESSMENT PRIOR TO IMMUNOMODULATION THERAPY - EXPERIENCE FROM AN INFECTIOUS DISEASES UNIT

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Background: The increasing use of immunomodulatory therapies has motivated the development of strategies to assess and prevent infectious diseases in these immunosuppressed patients, in whom the risk of serious infections is higher.

Objectives: The aim of this study was to recognize the need to standardize prophylactic and therapeutic strategies in this population.

Methods: Retrospective review of clinical files of patients evaluated in the infectious risk assessment in an outpatient clinic at the Infectious Diseases Unit at Hospital de Curry Cabral in Lisbon, between June 2016 and November 2019. We reviewed information regarding sex, age, origin, occupation, past travels as well as plans of future ones, contact with live animals, intake of unpasteurized products or unsafe drinking water, along with relevant data regarding past medical history and previous and/or ongoing treatments, including immunomodulatory ones.

Results: During the established timeline, 1305 appointments were carried out, corresponding to a total of 415 patients. The majority of patients were female (263; 63.7%), the average age was 50 years and 82% were of Portuguese nationality. The most frequent groups of diseases were autoimmune/inflammatory (84.1%) and demyelinating (10.1%). At the date of the first consultation, 70% were already under immunosuppression. Screening for latent tuberculosis infection (LTBI) was done in 99% of the patients ($n = 410$) and treatment was proposed to 160 patients (38.5%). At the time of screening, 56.8% of the patients were under immunosuppressive therapies, which included high doses of systemic corticosteroids (37%), anti-TNF alpha (7.7%) and combine therapy with non-biologic agents. Active disease was diagnosed and treated in two patients. Interferon gamma release assay test (IGRA) was positive in 56.8% of patients ($n = 91$), negative in 32.5% ($n = 52$) and indeterminate in 7.5% ($n = 12$). Of the 69 patients (43%) with indeterminate/negative or not performed IGRA, Mantoux test (TST) was positive in 48 patients. In the remainder, the treatment proposal for LTBI was based on clinical, epidemiological or radiological signs suggestive of past infection.

In order to prevent hyperinfection/disseminated strongyloidiasis, 354 individuals were screened with *Strongyloides stercoralis* serology, of which 51 patients (14.4%) had a positive result and were treated with ivermectin. Regarding vaccination, the recommendation for annual influenza vaccination was reinforced, together with the prevention of invasive pneumococcal disease. In view of future travelling plans, vaccination against yellow fever ($n = 10$), meningococcal disease ($n = 7$), typhoid fever ($n = 6$), and polio ($n = 2$) was recommended. In cases without a previous history of measles and according to the year of birth, VASPR was prescribed to 6 patients. Vaccination to prevent herpes zoster was recommended to 20 patients. After serological evaluation, the vaccine against hepatitis A and hepatitis B was prescribed to 89 and 132 patients, respectively, the latter when serological evidence of previous vaccination or contact was absent. We identified 10 cases of positive anti-HCV antibodies, with undetectable viral load. Primary prophylaxis for *Pneumocystis jirovecii* pneumonia was recommended to 104 patients. Prophylaxis against reactivation of Herpes simplex infection was initiated in 4 patients.

Conclusion: The decision to start immunosuppressive therapy comes with benefits and risks. Appropriate screening prior to starting therapy is an essential tool for its safe use. Referral to a specialised Infectious Risk Assessment consultation should be done promptly in order to review and address accordingly the risk of specific infections taking in to account the patients clinical and epidemiologic history.

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