coronary artery calcium (CAC) score is a surrogate for atherosclerosis that strongly predicts incident coronary artery disease and major CVD events, independent of traditional risk factors. The prevalence of CAC deposition in SLE patients over the age of 45 is known to be significantly higher compared with the Multi-Ethnic Study of Atherosclerosis (MESA) cohort, however data on patients <45 years of age is scarce. We evaluated CAC scores in younger SLE patients, compared with healthy controls from the Coronary Artery Risk Development in Young Adults (CARDIA) cohort.

Methods We identified 76 SLE patients meeting 1997 ACR classification criteria, without known coronary artery disease and who had a non-contrast CT chest performed as part of their clinical care, with images retrievable for calculation of CAC scores, using the Agatston score. Demographics, disease characteristics, and comorbidities were ascertained. Prevalence of any calcification, defined as CAC>0, was reported and compared with data from the CARDIA cohort, a large biracial U.S. cohort of patients ages 33 to 45 at time of chest CT scan for CAC determination. Additionally, within our SLE cohort, we investigated the relationship between disease characteristics and presence of any coronary artery calcification.

Results 76 SLE patients were studied (40±13 years old, 90% female, 33% Hispanic, 40% African American, disease duration 7±6 years). Patients met on average 6±2 ACR-SLE classification criteria; all had positive ANA titers, 64% had elevated dsDNA titers. Average SLE disease severity index¹ was moderate at 5±3, 46% had lupus nephritis (LN) and 37% tested positive for antiphospholipid (APL) antibodies. The prevalence of CAC>0 was 42% for patients of all ages, 32% for age <45, 62% for age 45. CAC scores were between 1 and 100 in 72% of the patients and >100 for the remaining 28%. When compared with the CARDIA subjects, more SLE patients ages<45 had a CAC>0 (32.0% vs 9.6%, p-value<0.00001). Additionally, 29% of SLE patients age 18 to 32, with 5 years median SLE disease duration, had abnormal CAC scores; the youngest of whom was 21 years old. SLE patients with CAC were more likely to be older, have a history of a HTN, and have higher BMI. There were no significant differences in SLE disease duration, SLE severity index, APL antibodies, prevalence of LN, or smoking status, between patients with and without CAC.

Conclusions Young SLE patients have a significantly higher CAC scores compared with the general population. A CAC >0 was seen in 32% and 29% of SLE patients <45 and <33 years old, respectively. Our data suggest that subclinical atherosclerosis in SLE develops as early as the second decade of life, and warrant screening and cardio-protective interventions.

Funding Source(s): None

145 INTRACARDIAC TUMOR VS THROMBUS IN PATIENTS WITH ANTIPHOSPHOLIPID SYNDROME: TWO CASE REPORTS

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Background Antiphospholipid syndrome (APS) is characterized by spontaneous and recurrent vascular thromboses, abortion and thrombocytopenia. Cardiac manifestations are rare, but may occur as cardiac masses, such as thrombus (Libman-Sacks endocarditis). On the other hand, it is known that the most common type of primary cardiac tumors, myxoma, can produce clinical pictures similar to APS and SLE, and that tumor exeresis resolves symptoms.

Methods We examined 2 patients diagnosed with SLE and APS that presented cardiac mass. They were assessed with careful history taking, physical examination, laboratory tests, echocardiography and histological examination.

Results Case 1. A 13-years-old girl, with history of autoimmune hemolytic anemia treated with corticosteroids, folic acid and splenectomy a year before, presented a right ischemic stroke with hemiparesis sequel. Laboratory tests revealed ANA, antiDNAs, aCL and lupus anticoagulant positive and echocardiography showed a cardiac mass. She was underwent surgery to exeresis the mass, which was compatible with myxoma. She was diagnosed with immune syndrome secondary to myxoma and did not take treatment. Seven months after the complete exeresis of the myxoma, she was admitted to our hospital because of two months fever, polyarthralgia, oral ulcers and malar rash. Echocardiography showed pericardial effusion and blood tests showed lymphopenia, anemia, ANA and antiDNA positive and elevation of acute phase reactants; urinalysis was normal. She was diagnosed with SLE flare and was successfully treated with corticoids and started hydroxychloroquine, azathioprine and acetylsalicylic acid.

The second case is a 48-years-old woman diagnosed with SLE and associated APS (oral ulcers, thrombosis, arthritis, malar rash, ANA, Coombs and aCL positive), with a history of bilateral iliac arterial ischemia caused by myxoma emboli (confirmed by histological examination) and a cardiac mass on echocardiogram. Fourteen months after the vascular surgery, the patient still needs treatment with rituximab, azathioprine and corticoids to control SLE activity and is on anticoagulant treatment to prevent thrombotic episodes.

Conclusions In patients with myxoma and symptoms of APS and/or SLE, there is doubt whether these are secondary to myxoma or if these diseases coexist, so it is recommended to closely monitor clinical activity after exeresis of myxoma and consider not suspending immunosuppressants and/or anticoagulants or the progressive withdrawal of drugs according to symptoms, in order to avoid possible serious complications of autoimmune disease.

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146 CLINICAL AND IMMUNOLOGICAL RESPONSE OF CHILDHOOD-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS TREATED WITH RITUXIMAB

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Background Systemic lupus erythematosus (SLE) is an autoimmune disease that is more severe in pediatric population than