severe thrombocytopenia (<50 K/ μ l) was present in 28.7% of patients. Finally, 25.8% of patients presented with pancytopenia.

In 72.3% of patients, bone marrow interpretation, along with clinical and laboratory findings, lead to a conclusive diagnosis. The most common final diagnoses were disease activity (24.8%) and drug-associated toxicity (28.7%). The agreement between the initial diagnostic impression and the conclusion after BMA was performed was 45.5%.

We analyzed factors associated with the most common etiologies (table 1). Regarding BMA findings, when cytopenias were secondary to disease activity, it was more frequent for the bone marrow to be hypercellular (56 vs 23%, $p=0.006$) and to have increased megakaryocytes (40 vs 17.4%, $p=0.048$). Conversely, granulocytic dysplasia was less common in this group of patients (17.4% vs 54.3%, $p=0.036$).

After multivariate analysis, a neutrophil count <1000 cells/ μ l was a protective factor for disease activity (OR 0.021; 95% CI 0.001–0.428, $p=0.012$). On the other hand, a history of renal activity (OR 4.3; 95% CI 1.3–14.2, $p=0.024$) and neutrophils <1000 cells/ μ l (OR 4.05; 95% CI 1.15–14.19, $p=0.029$) were found to be independent risk factors for myelotoxicity.

Conclusions The most frequent diagnoses of SLE patients presenting with cytopenias were disease activity and drug-associated bone marrow toxicity. There are clinical characteristics and laboratory findings that may guide the diagnostic approach and thus, choose the most appropriate therapeutic intervention. BMA and biopsy play a key role in complementing the study of cytopenias in SLE patients, allowing for a complete evaluation of the particular context of each patient.

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LEVERAGING A COMMUNITY-ACADEMIC PARTNERSHIP TO INCREASE LUPUS AWARENESS IN VULNERABLE COMMUNITIES

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Background The Popular Opinion Leader (POL) model was developed by the Centers of Disease Control to train community leaders to increase awareness in their social networks about health-related issues that disproportionately affect vulnerable populations. We established an academic-community partnership in Chicago and Boston and used a POL model to increase knowledge about lupus and to promote early care-seeking behaviors among African American individuals. With the knowledge that where a person lives directly influences his/her health, one of our goals was to understand the socio-demographic characteristics of the Chicago communities where the POLs disseminated lupus-related information.

Methods Ten POLs were identified and participated in four two-hour session educational training program. All POLs were female, the mean age was 59% and 100% were African American. Over the course of 6 months, the POLs tracked their encounters throughout their social networks by recording addresses of venues where educational information was disseminated and the number of individuals contacted. Data were

Abstract 143 Table 1 Chicago sociodemographic factors

Community-Level Data	Washington Heights	Morgan Park	Englewood	Roseland
Racial Composition				
% African American	95.8%	54.6%	95%	96.1%
Clinical				
No health insurance	10.5%	8.4%	17.2%	12.4%
Economic				
Individual Poverty *	18.6%	18.5%	30.8%	27.2%
Education				
Not a high school graduate	10.1%	10.7%	19.7%	13.5%

* Individual poverty is classified as percent below Federal Poverty Level (U.S Census; American Community Survey 2010–2015).

entered into the Geographic Information System to evaluate the reach of their networks. We utilized the Healthy Chicago Database to describe the sociodemographic factors and some of the health resources of the Chicago neighborhoods identified by the POLs social networks.

Results The 10 POLs social networks were concentrated in four selected communities (Washington Heights, Morgan Park, Englewood and Roseland). These neighborhoods are located on the Southside of Chicago where health, educational, and financial resources are limited. All four communities were predominantly African-American, range 54.6%–96.1%. Individuals living in these neighborhoods with no health insurance ranged from 8.4%–17.2%, in Morgan Park and Englewood, respectively. Individual poverty was highest in Englewood (30.8%) and Roseland (27.2%) compared with approximately 18% in the other two neighborhoods. The percentage of individuals who did not complete high school was highest in Englewood (19.7%) and Englewood (13.5%) compared with approximately 10% in the other two areas.

Conclusions Engagement of local community members through POL conversations tapped into neighborhoods that demonstrated concerning sociodemographic features such as individual poverty, lack of health insurance, and lack of education through high school. Since the POLs had strong social networks prior to recruitment, they selected these communities to facilitate dissemination of lupus awareness education where resources may be limited. This illustrates the importance of POL engagement with community stakeholders who can use this information to work towards reducing health disparities in lupus in communities with limited resources.

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YOUNG SLE PATIENTS HAVE HIGHER CORONARY ARTERY CALCIUM SCORES COMPARED WITH POPULATION CONTROLS

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Background Cardiovascular disease (CVD) is a leading cause of death in systemic lupus erythematosus (SLE). The

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.

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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