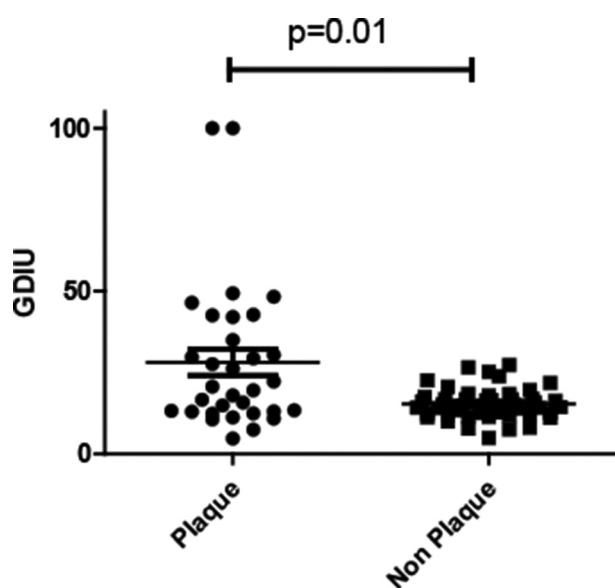


**Methods** The earliest available sample from a cohort of 92 SLE patients was tested for anti-Domain I (aDI), anti Beta-2-Glycoprotein-I, and anti-Cardiolipin antibodies. Persistent positivity was not assessed. These patients then had vascular ultrasound scans (carotid and femoral arteries) (mean 10 years later) to assess subclinical atherosclerotic plaque. A range of demographic, clinical and serological markers were recorded at the time of the scan. Predictors of plaque presence were investigated using binary logistic regression.

**Results** A total of 34 patients from the cohort of 92 had atherosclerotic plaque (37%). A total of 32 patients had aDI positivity, of which 20 (62.5%) also had Plaque, this is reflected by the significantly higher levels of aDI antibodies seen in Plaque patients ( $p < 0.01$ , figure 1). Anti-DI positivity was predictive of the development of plaque in the future (Odds Ratio (OR) 5.476,  $p < 0.001$ ). No association was seen for any other antibody tested. Multiple binary logistic regression showed aDI positivity had as much predictive value as triglyceride levels on the day of the scan (OR 3.5 vs 3.9, table 1) for predicting plaque in patients. Age at scan was a third independent variable associated with atherogenic plaque.



**Abstract P31 Figure 1** A significantly higher level of aDI antibody was seen in plaque patients in comparison to non-plaque patients.

**Abstract P31 Table 1** Binary logistic regression showing the odds ratios associated with aDI positivity, age at scan and triglyceride levels

	OR	95% C.I.		p
		Lower	Upper	
AntiD1 positive	3.512	1.137	10.849	.029
Age at Scan >50	10.517	3.479	31.794	.000
Triglyceride Level	3.869	1.155	12.957	.028

**Conclusions** Early aDI positivity may be a good marker of atherogenesis in SLE patients in the long term.

**P32 ASSESSMENT OF LEFT VENTRICULAR USING SPECKLE TRACKING ECHOCARDIOGRAPHY AND ITS RELATIONSHIP WITH INSULIN RESISTANCE IN NON-DIABETIC PATIENTS WITH SLE**

<sup>1</sup>Claudia Mendoza-Pinto, <sup>1</sup>Pamela Munguía-Realpozo, <sup>2</sup>Liliana Aquino, <sup>1</sup>Adalberto Ramírez-Hernández, <sup>2</sup>Roberto Berra-Romani, <sup>1</sup>Aurelio López-Colombo, <sup>1</sup>Mario García-Carrasco. <sup>1</sup>High-Specialty Medical Unit-CIBIOR, Mexican Social Security Institute, Puebla; <sup>2</sup>Medicine School, Meritorious Autonomous University of Puebla, Mexico

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**Background/Purpose** Insulin resistance (IR), which adversely impacts left ventricular (LV) remodeling and function in middle-aged patients.<sup>1</sup> Although IR may not play as marked a role in determining LV dysfunction as hypertension, the impact of IR on ventricular dysfunction is unknown in SLE patients.<sup>2</sup> The aims of this study were: 1) to determine the role of speckle tracking echocardiography in the early detection of LV dysfunction in SLE and 2) to examine the influence of IR measured by the Quantose score on subclinical LV dysfunction using speckle tracking echocardiography in normotensive SLE patients.

**Methods** This cross-sectional study included SLE adult women without diabetes mellitus (DM), hypertension or obesity. All participants underwent detailed two-dimensional Doppler and two-dimensional speckle tracking echocardiography. Global longitudinal strain (GLS%) and global circumferential strain (GCS%) were determined. LV diastolic dysfunction (LVDD) was verified according to current guidelines. Blood samples were drawn to estimate the Quantose score for IR, (derived from insulin,  $\alpha$ -hydroxybutyrate, linoleoyl-glycerophosphocholine, and oleate).

**Results** Sixty-nine patients were included (mean age:  $38.9 \pm 9.9$  years, mean disease duration  $10.8 \pm 4.7$  years). Despite a normal ejection fraction in all participants, ten (14.5%) patients had abnormal LV systolic GLS. The frequency of IR was high (65%). The GLS% and GCS% did not differ in patients with and without IR ( $-20.8 \pm 3.1$  vs.  $-20.5 \pm 2.1$ ;  $p = 0.61$  and  $-25.9 \pm 8.4$  vs.  $-24.4 \pm 9.3$ ;  $p = 0.47$ , respectively). The prevalence of LVDD was 38.1% in patients with IR vs. 25.0% in patients without IR ( $p = 0.30$ ).  $E/e'$  and  $E/A$  ratios did not differ significantly between groups ( $5.8 \pm 1.6$  vs.  $5.7 \pm 1.9$ ;  $p = 0.86$  and  $1.3 \pm 0.3$  vs.  $1.3 \pm 0.3$ ;  $p = 0.27$ ).

**Conclusions** Although IR was high in our patients with SLE, IR was not associated with either LV systolic dysfunction or LVDD in SLE patients without DM or hypertension.

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