



## 6045-580. RETINOPATÍA: UNA VENTANA AL RIESGO CARDIOVASCULAR Y A LA ANATOMÍA CORONARIA

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### Resumen

**Introduction and objectives:** There is evidence of the relationship between retinopathy and cardiovascular disease. However, the correlation between the degree of retinopathy and cardiovascular morbidity and mortality has been less studied. The objective was to assess the relationship between the degree of retinopathy (hypertensive, atherosclerotic and diabetic) with the incidence of cardiovascular major events. Validate Syntax score as a predictor of major cardiovascular events.

**Methods:** Prospective observational cohort study with 54 patients undergoing diagnostic coronary angiography by the first medical indication who underwent ophthalmoscopy. Grouping of cohort exposed to patients with high degree of retinopathy and unexposed cohort of patients with low degree of retinopathy (hypertensive, atherosclerotic and diabetic). Analysis of clinical parameters, baseline and follow-up year, and coronariography and indirect ophthalmoscopy in recruiting patients.

**Results:** As total of 54 patients (61% men; 39% women) with mean age of  $64.96 \pm 13.93$  years. Risk factors include hypertension (80.4%), diabetes mellitus (31.4%), dyslipidemia (52.9%), former smoking (16%), sedentary (94%), obesity (BMI  $29.5 \pm 5.3$ ) and know coronary artery disease (7.4%). The 37% had significant coronary artery disease and 95% had retinopathy. In the one year follow up, there was one death due to noncardiovascular causes. The presence of hypertensive retinopathy was associated with hospital readmission significantly ( $p = 0.034$ ). With respect to Syntax Score, Patients who were readmitted in the first year had a higher score on the initial coronary angiography ( $14.63 \pm 15.93$ ) than those who were not readmitted ( $4.68 \pm 7.17$ ) with significant differences ( $p = 0.02$ ). Also, the patients who requiring new coronary angiography had higher Syntax score in the initial coronariography ( $18.25 \pm 21.5$  front  $4.91 \pm 7.416$ ;  $p = 0.006$ ).

#### Retinopatía, Syntax score y reingreso en enfermedad coronaria

	Readmission 1 year	No readmission 1 year	Sig.
Retinopathy	5 (10%)	34 (66%)	$p = 0.013$

Without retinopathy		6 (12%)	6 (12%)	
Diabetic retinopathy type (n = 2)	Non proliferative	1 (50%)	1 (50%)	p > 0,05
	Proliferative	0	0	
Hypertensive retinopathy type (n = 38)	Grade I	0	19 (50%)	p = 0,034
	Grade II	4 (11%)	15 (39%)	
Atherosclerotic retinopathy type (n = 36)	Grade I	16 (44%)	1 (40%)	p = 0,483
	Grade II	14 (39%)	3 (8%)	
	Grade III	2 (6%)	0	
		Syntax score first coronary angiography		
Hospital readmission 1 year	Yes (n = 4)	14.63 ± 15.93		p = 0.02
	No (n = 44)	4.68 ± 7.17		
Need new coronariography 1 year	Yes (n = 2)	18.25 ± 21.5		p = 0.006
	No (n = 46)	4.91 ± 7.416		

**Conclusions:** The presence of hypertensive retinopathy was associated with increased incidence of hospital readmission. It was noted that patients with higher score Syntax likewise showed greater cardiovascular readmission and need for coronary angiography. As the scale Syntax is predictor of cardiovascular morbidity and mortality, the presence of retinopathy may be associated with worse outcomes and higher rates of hospital readmissions.