#### **Supplementary Online Content**

Persu A, Lopez-Sublet M, Al-Hussaini A, et al. Prevalence and disease spectrum of extracoronary arterial abnormalities in spontaneous coronary artery dissection. *JAMA Cardiol*. Published online November 24, 2021. doi:10.1001/jamacardio.2021.4690

**eTable 1.** Comparison of General and Coronary Characteristics Between SCAD Patients With and Without FM

**eTable 2.** Prevalence and Severity of Arterial Tortuosity in Renal and Iliac Vessels of Patients With Spontaneous Coronary Artery Dissection Versus Controls

**eTable 3.** Prevalence and Characteristics of Fibromuscular Dysplasia and Other Extracoronary Abnormalities Detected by MRA and CTA in Patients Evaluated by Both Imaging Modalities

eFigure. Flow Chart of Patients From the UK SCAD Registry Included in the Current Analysis

This supplementary material has been provided by the authors to give readers additional information about their work.

# eTable 1. Comparison of General and Coronary Characteristics Between SCAD Patients With and Without FMD

	Patients	Patients	<i>P</i> -	
	without FMD	with FMD	value	
	N = 118	N =55	,	
Women (%)	113/118 (95.8)	54/55 (98.2)	0.42	
Age at diagnosis (years)	44.6 ± 7.7	$44.5 \pm 8.3$	0.96	
Body mass index (kg/m <sup>2</sup> )	$25.6 \pm 5.2$	$28.5 \pm 17.0$	0.10	
Smoking habit				
Never/former smokers	89/118 (75.4)	35/55 (63.6)	0.27	
Current smokers	27/118 (22.9)	19/55 (34.5)		
Treated hypertension	20/118 (16.9)	11/55 (20.0)	0.63	
Type 2 diabetes	0/118 (0)	0/55 (0)	-	
Treated dyslipidaemia	11/118 (9.3)	3/55 (5.5)	0.39	
Type of Acute Coronary Syndromes at				
presentation of SCAD:	76/118 (64.4)	29/55 (52.7)	0.31	
NSTEMI	34/118 (28.8)	20/55 (36.4)		
STEMI	8/118 (6.8)	6/55 (10.9)		
Cardiac arrest		. ,		
Percutaneous Coronary Intervention	39/118 (33.0)	20/51 (39.2)	0.44	
Bailout Coronary Artery Bypass Graft	2/118 (1.7)	3/55 (5.5)	0.16	
Angiographic features:				
1. Coronary artery involved (%):				
LM	8/118 (6.8)	4/55 (7.3)	0.91	
LAD	89/118 (75.4)	33/55 (60.0)	0.04	
LCX	34/118 (28.8)	21/55 (38.2)	0.22	
RCA	15/118 (12.7)	14/55 (25.5)	0.04	
2. Portion of the artery involved (%):				
Proximal involvement	27/118 (24.2)	9/55 (14.3)	0.33	
Mid involvement	53/118 (44.9)	25/55 (45.5)	0.95	
Distal involvement	64/118 (54.2)	24/55 (43.6)	0.32	
Branch involvement	36/118 (30.5)	18/55 (32.7)	0.77	
3. Multivessel (%)	18/118 (15.3)	9/55 (16.4)	0.85	
4. Multisegment (%)	44/118 (37.3)	20/55 (36.4)	0.91	
5. Saw Class (%)				
1	17/118 (14.4)	6/55 (10.9)	0.96	
2a	53/118 (44.9)	26/55 (47.3)		
2b	22/118 (18.6)	10/55 (18.2)		
3	9/118 (7.6)	6/55 (10.9)		
4	17/118 (14.4)	6/55 (10.9)		
Recurrence (%)	9/118 (7.6)	7/55 (12.7)	0.45	
Beighton score				
<4	82/118 (69.5)	38/55 (69.1)	0.96	
≥4	36/118 (30.5)	17/55 (30.9)		
Migraines	59/118 (50.0)	24/55 (43.6)	0.56	
PHACTR1				
AA	53/114 (46.5)	20/49 (40.8)	0.50	
AG	55/114 48.2)	23/49 (46.9)	0.88	

GG	6/114 (5.3)	6/49 (12.2)	0.12
Aneurysms	8/118 (6.8)	5/55 (9.1)	0.59
Arterial dissections	2/118 (1.7)	1/55 (1.8)	0.95
Tortuosity*	79/118 (66.9)	42/55 (76.4)	0.21

\*defined as one or more curves  $\geq 45^{\circ}$ 

SCAD: Spontaneous Coronary Artery Dissection; FMD: fibromuscular dysplasia.

#### eTable 2. Prevalence and Severity of Arterial Tortuosity in Renal and Iliac Vessels

## of Patients With Spontaneous Coronary Artery Dissection Versus Controls

Tortuosity evaluation	Patients with SCAD N= 173	Controls N=41	<i>P</i> -value
	Renal arteries		
Right Renal artery			
Straight (%)		36/41 (87.8)	0.49
Tortuosity Index	158/173 (91.3)	21.0 (1/41)	0.69
Number of curves $\geq 45^{\circ}$	$14.0 \pm 5.7$	1.0 (1/41)	0.78
Mean angle	$6.9 \pm 21.4 \\ 54.9 \pm 8.7$	62.0 (1/41)	0.45
Left Renal artery			
Straight (%)	161/173 (93.1)	40/41 (97.6)	0.28
Tortuosity Index	29.1 ± 9.3	25.0 (1/41)	0.71
Number of curves $\geq 45^{\circ}$	1 (1/173)	-	-
Mean angle	$70.1 \pm 13.6$	-	-
	Iliac arter		
Right Common Iliac artery			
Straight (%)	163/173 (94.2)	41/41 (100)	0.12-
Tortuosity Index	$17.0 \pm 7.4$	-	-
Number of curves $\geq 45^{\circ}$	1 (1/173)	-	-
Mean angle	$56.8 \pm 12.6$	-	
Right External Iliac artery			
Straight (%)	170/173 (98.3)	41/41 (100)	0.49
Tortuosity Index	$16.3 \pm 17.2$	-	-
Number of curves $\geq 45^{\circ}$	$1.5 \pm 0.7$	-	-
Mean angle	$68.5\pm29.0$	-	-
Left Common Iliac artery			
Straight (%)	155/173 (89.6)	38/41 (92.7)	0.55
Tortuosity Index	$16.1\pm9.5$	$19.7\pm8.6$	0.55
Number of curves $\geq 45^{\circ}$	$1.1 \pm 0.3$	$1 \pm 0$	0.71
Mean angle	$61.2\pm14.7$	$68.5\pm24.8$	0.56
Left External Iliac artery			
One or more curves	171/173 (98.8)	41/41 (100)	0.40
≥45° (%)	$26.8 \pm 34.0$	-	-
Tortuosity Index	2 (1/173)	-	-
Number of curves ≥45°	67.5 (1/173)	-	_
Mean angle	``´´´		

### eTable 3. Prevalence and Characteristics of Fibromuscular Dysplasia and Other Extracoronary Abnormalities Detected by MRA and CTA in Patients Evaluated by Both Imaging Modalities

FMD characteristics	MRA	СТА	P-value
	N=43	N=43	
Prevalence of multifocal FMD (%)			
At least one arterial bed	15/43 (34.9)	15/43 (34.9)	1.00
At least two arterial beds	7/43 (16.3)	7/43 (16.3)	1.00
Three or more arterial beds	1/43 (2.3)	1/43 (2.3)	1.00
Prevalence of FMD lesions in each			
vascular bed	6/43 (14.0)	8/43 (18.6)	0.56
Cervical	10/43 (23.3)	7/43 (16.3)	0.42
Renal	0/43 (0)	0/43 (0)	-
Aorta	2/43 (4.7)	3/43 (7.0)	0.65
Visceral	5/43 (11.6)	5/43 (11.6)	1.00
Iliac	0/43 (0)	1/43 (2.3)	0.31
Intracranial			
Aneurysm (%)	7/43 (16.3)	7/43 (16.3)	1.00
Intracranial aneurysm (%)	2/43 (4.7)	2/43 (4.7)	1.00
Arterial dissection	1/43 (2.3)	1/43 (2.3)	1.00

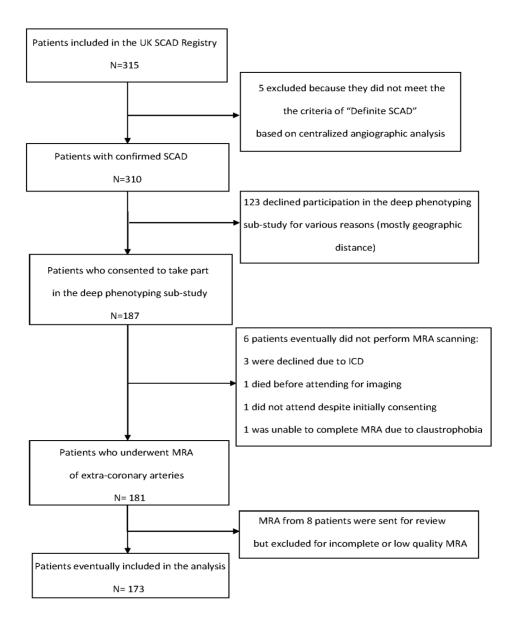


Figure S1: Flow-chart of patients from the UK SCAD Registry included in the current analysis.

eFigure. Flow Chart of Patients From the UK SCAD Registry Included in the Current Analysis