Supplementary material

Kołsut P, Tyczyński P, Michałowska I, et al. Coronary anomalies in patients with acquired significant aortic stenosis. Pol Heart J. 2024.

Table S1. Abnormal coronary arteries in patients with significant aortic stenosis (by number of patients and chronologically). Brief literature review

Author, year of publication (chronologically)	**Number of patients**	**Coronary anomaly**	**Treatment**	**BAV**	**Follow-up (if yes, months)**
LCx from RCA/R-SoV					
Liebrich M et al. 2015	4	LCx from RCA	AVR	1	Yes (16–30)
Harky A et al. 2017	1			1	No
Yokoyama S et al. 2011	1	LCx from R-SoV		N/D	
Flores R et al. 2001	1	LCx from RCA	AVR+LCx-dissection from annulus)	0	
RCA from aorta					
Maximo J et al. 2021	1	Retroaortic RCA	AVR	1	In-hospital
Inan K et al. 2010	1	RCA from aortic root		1	Yes (12)
Wariishi S et al. 2000	1	RCA high-P take-off		1	No
RCA from L-SoV					
Jung HJ. 2016	1		AVR		

Roughneen PT et al. 2016	1	RCA from L-SoV		0	No
Koyama S. 2013	1		AVR+CABG	0	
RCA from LV					
Kang N. 2013	1	RCA from LV	AVR+CABG	0	No
Okuyama M. 1995	1			0	
LCA from R-SoV					
Alameddine AK et al. 2019	2	LCA from R-SoV	AVR+CABG	0	No
Nader J et al. 2014	1		AVR+(LMCA-repositioning)	0	Yes (14)
Hamamoto M et al. 2013	1		AVR	0	No
SCA from R-SoV					
Gallo M et al. 2013	1	SCA from R-SoV	AVR	0	0
Guma JR et al. 1990	1	SCA from R-SoV		N/D	
Ishida N. 2013	1		AVR+AAo prosthesis	1	
SCA from L-SoV					
Singam SNV. 2017	1	SCA from L-SoV	AVR	1	No
Jung Y et al. 2016	1				
Ichikawa Y. 1997	1	SCA from L-SoV		1	No
ARCAPA					
Musuraca G et al. 2021	1	ARCAPA	AVR	0	Yes (3)
Torsten B et al. 2005	1		AVR+RCA re-implantation	1	0

Abbreviations: AAo, ascending aorta; ARCAPA, anomalous right coronary artery from the pulmonary artery; AVR, aortic valve replacement; BAV, bicuspid aortic valve; CHD, complex heart disease; CTA, computed tomography angiography; LCA, left coronary artery; LCx, left circumflex coronary artery; L-SoV, left sinus of Valsalva; LV, left ventricle; N/D, no data; P, posterior; RCA, right coronary artery; R-SoV, right sinus of Valsalva; SCA, single coronary artery

Table S2. Demographics and clinical data

Patient	Male	Age, years[a]	DM	HT	AF	AMI	Stroke	CAD
1	0	47	0	0	0	0	0	1
2	1	68	0	1	0	0	0	1
3	1	65	0	1	0	0	0	0
4	0	59	0	1	0	0	0	1
5	1	81	0	1	1	0	0	0
6	0	67	1	0	0	0	0	1
7	0	82	0	0	1	0	0	1
8	1	69	0	1	0	0	0	0
9	0	69	0	1	0	0	0	0
10	1	19	0	0	0	0	0	0
11	0	43	0	0	0	0	0	0
12	0	72	0	1	0	0	0	0
13	1	62	0	0	0	0	0	0
14	0	60	0	1	0	0	0	0
15	1	55	0	1	0	0	0	0
16	1	72	0	1	0	0	0	0
17	1	59	0	1	1	1	0	1
18	0	74	0	1	0	0	0	0
19	0	64	0	1	0	0	0	0
20	1	57	0	1	0	0	0	0
21	1	76	0	1	1	0	0	0
22	0	66	0	1	0	0	0	0
23	0	71	0	1	1	0	0	0
24	1	74	0	1	0	0	0	0
25	0	82	0	1	0	1	0	1
26	0	73	0	1	0	0	0	0
27	1	81	0	1	0	0	0	1
28	1	74	0	0	0	0	0	1
29	0	57	0	1	0	0	0	0

[a]At the time of intervention

Abbreviations: AF, atrial fibrillation; AMI, acute myocardial infarction; CABG, coronary artery by-pass grafting; CAD, coronary artery disease; DM, diabetes mellitus; HT, arterial hypertension; PCI, percutaneous coronary intervention

Table S3. Echocardiographic data, type of coronary anomaly and interventional treatment

Patient	**Aortic gradient (pre-interventional), mm Hg (maximal/mean)**	**AR (pre-interventional)**	**AAo size, (last), mm**	**LVEF, (last), %**	**Type of coronary anomaly**	**BAV**	**Interventional treatment**	**Follow-up time, months**
1	90/52	Moderate	40	60	LCx from R SoV	1	AVR + CABG (SVG → RI)	2
2	98/62	Mild	41	60	LCx from R SoV	1	AVR + CABG (SVG → RCA)	1
3.	90/54	0	47	65	SCA from R-SoV	1	AVR + SCP	3
4	96/68	Mild	31	65	RCA from L-SoV	0	AVR + CABG (SVG → RCA and LIMA → LAD)	1
5	111/62	0	33	70	LCx from RCA,	1	TAVI	Intra-procedural D

					RCA above SoV			
6	85/57	0	43	70	RCA from LCA *via* collateral	1	AVR	1
7	80/45	Mild	34	35	RCA from L-SoV	0	AVR + MVRe + TVRe	In-hospital D
8	123/75	Mild	38	60	LCx from R-SoV	0	AVR	2
9	*	*	39	60	RCA from L-SoV	1	AVR	60
10	*	*	52	60	LCx from RCA	1	AVR	30 y.
11	108/65	Mild	39	70	SCA from L-SoV	1	AVR	230
12	92/60	0	33	70	SCA from L-SoV	0	AVR	35
13	92/61	0	39	60	RCA from L-SoV	0	AVR + SP	132
14	75/50	Mild	34	65	LCx from RCA	0	AVR	1

15	82/56	0	44	65	LCA from R-SoV	0	AVR + SP	2
16	59/30	Moderate	36	28	LCx from RCA	0	AVR	28
17	103/60	Mild	36	65	LCA from R-SoV	1	AVR + LVOT resection	1
18	98/68	0	34	73	RCA from L-SoV	0	AVR + CABG	1
19	88/49	0	28	65	LCx from R-SoV	0	AVR	1
20	87/43	0	40	45	RCA from L-SoV	0	AVR	64
21	90/43	Moderate	34	60	LCx from R-SoV	1	AVR	1
22	120/70	Moderate	39	70	LCA and RCA above SoV	1	AVR	1
23	66/43	0	40	65	LCx from RCA	0	AVR	1
24	100/52	0	47	65	LCA from R-SoV	1	AV + SP	1

25	53/34	Mild	30	25	LCx from RCA	1	B-A-V	0.5
26	71/47	0	32	55	Absent LCx	0	0	0
27	68/40	0	39	60	LAD mid and distal from RCA	0	AVR	15
28	80/44	Mild	42	65	RCA above R-SoV	1	AVR + CABG	1
29	108/65	Moderate	42	65	SCA from L-SoV	0	AVR	195

*Missing data, operation many years ago

Abbreviations: AAo, ascending aorta; AR, aortic regurgitation; AVR, aortic valve replacement; BAV, bicuspid aortic valve; B-A-V, balloon aortic valvuloplasty; CABG, coronary artery by-pass grafting; D, death; LAD, left anterior descending coronary artery; LCA, left coronary artery; LCx, left circumflex coronary artery; LVEF, left ventricular ejection fraction; L-SoV, left sinus of Valsalva; LIMA, left internal mammary artery; MVRe, mitral valve repair; PCI, percutaneous coronary intervention; RCA, right coronary artery; RI, Ramus intermedius; SCP, supracoronary prosthesis; R-SoV, right sinus of Valsalva; SVG, saphenous vein graft; TAVI, transcatheter aortic valve replacement; TVRe, tricuspid valve repair; y, years