

주최·주관 대한심장혈관흉부외과학회

2024 대한심장혈관흉부외과학회

제56차 추계학술대회

2024. 10. 31 (Thu) - 11. 01 (Fri)

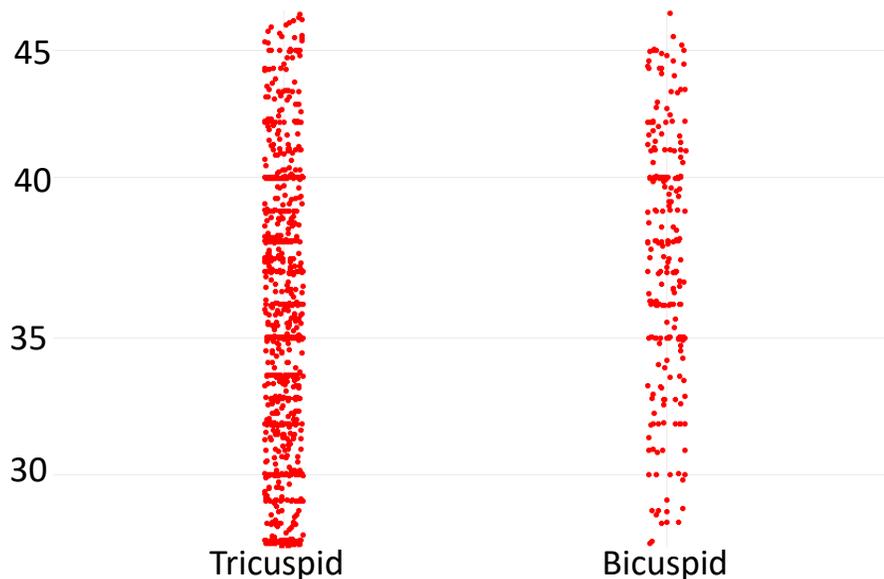
여수 엑스포 컨벤션센터



The fate of remaining ascending aorta after aortic valve replacement: A 7-year follow-up

- **The natural progression of ascending aorta dilatation following aortic valve replacement (AVR) are still topics of ongoing debate.**
- **We evaluated the fate of remaining aorta after AVR and identified the risk factors of future dilatation of the remaining aorta.**

- 1027 patients who underwent surgical AVR (2000.01~2018.05)
- Single center, retrospective study
 - Median f/u duration: 88.4 ± 56.7 months
- Cox proportional hazards regression
- Primary outcomes
 - Late aortic event after AVR (aortic re-intervention)



Variables	Total (n = 1027)
Age (years)	61.0 ± 14.0
Female, n (%)	473 (46.1)
Bicuspid	238 (23.2)
Smoking	173 (20.3)
HTN	321 (37.1)
DM	153 (17.7)
Dyslipidemia	76 (8.8)
BMI ≥ 25kg/m ²	235 (27.0)
CKD	331 (38.6)
Coronary artery disease	182 (20.9)
CPB time (mins)	200.2 ± 104.5
ACC time (mins)	130.8 ± 52.8
Isolated AVR	464 (45.2)
Concomitant operation	
Mitral valve	470 (38.4)
Tricuspid valve	295 (16.3)
CABG	115 (13.1)
ASD	43 (4.9)

Late aortic event after AVR

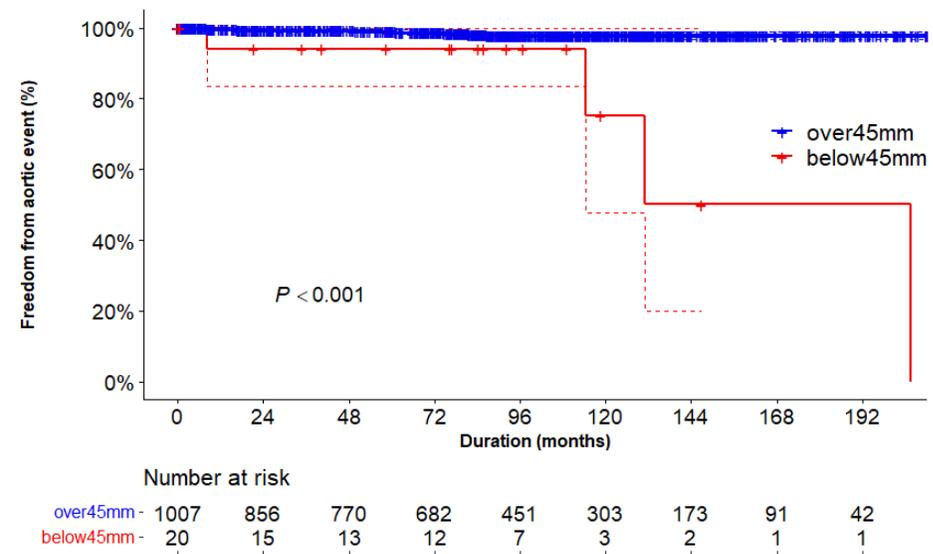
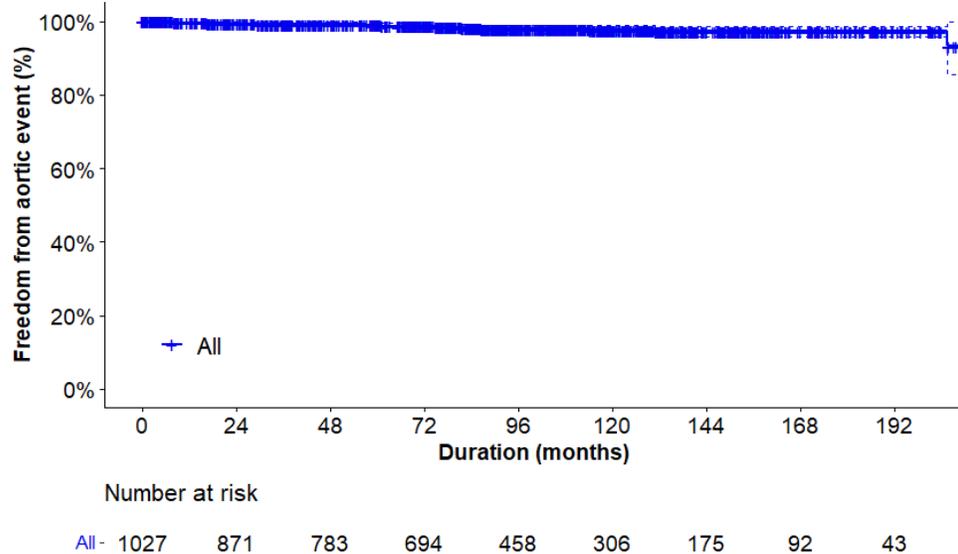
	Initial aorta size \leq 45mm N=1007	Initial aorta size $>$ 45mm N=20	P
Aortic event (-)	992 (98.5%)	16 (80.0%)	<0.001
Aortic event (+)	15 (1.5%)	4 (20.0%)	
	Tricuspid N=789	Bicuspid N=238	P
Aortic event (-)	774 (98.1%)	234 (98.3%)	>0.999
Aortic event (+)	15 (1.9%)	4 (1.7%)	

**Late Aortic event =
1.9% (19/1027 patients)**

- Mean months to aortic surgery: 62.6 ± 50.4
- Aortic procedure: ascending aorta replacement

Risk factors associated with late aortic event

Variable	Multivariable analysis	
	Odds Ratio (95% CI)	p Value
Initial aortic diameter >45mm	27.344 (7.435, 100.571)	<0.001
Bicuspid AV	2.062 (0.586, 7.255)	0.260
Coronary artery disease	2.139 (0.529, 8.655)	0.286
Age	0.984 (0.940, 1.031)	0.510



- Initial aortic diameter >45mm was a risk factor for late aortic event after AVR regardless of AV cusps.
- In patients with bicuspid and tricuspid AV, concomitant aortic replacement should be considered if the **initial aortic diameter exceeds 45mm.**