



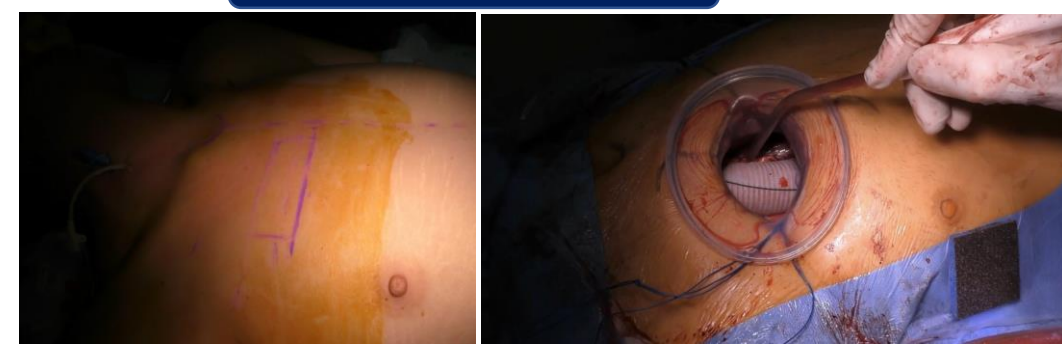
Aortic Root Surgery through Right Anterolateral Minithoracotomy: Initial Experience

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Objective:

- The purpose of this study is to evaluate the immediate outcomes of aortic root surgeries performed using the right anterolateral mini-thoracotomy approach

Methods:



Selection Criteria

- The ascending aorta at the level of the pulmonary artery trunk is located to the right of the sternum by more than 50%
- The distance between the ascending aorta and the sternum is less than 10 cm
- The distance between the plane of the annulus and the skin access is less than 16 cm
- The angle between the median line and the axis of the aorta is more than 45 degrees

Contraindications

- Previous cardiac surgeries
- Calcification of the ascending aorta
- History of pleuritis
- Stenotic pathology of the femoral arteries

Results:

Adult patients underwent aortic root surgery through right anterolateral mini-thoracotomy 2021-2022 (n = 7)

Valve-sparing
(n=5)

Valve-replacing
(n=2)

Patient	Intervention	CPB Time (min)	Aortic Occlusion (min)	ICU (days)	Hospital Stay (days)	Complications
M 67	BioBentall de-bono + hemiarch	265	148	6	23	Left-sided pneumothorax
M 37	David	223	186	2	14	None
F 32	David	185	150	1	15	None
M 40	David	218	177	1	27	Small branch PTE; pneumonia
M 25	David	470	228	-	-	Death*
M 39	Bentall de-Bono	155	110	1	7	None
F 42	Commissuroplasty + Supracoronary prosthesis+hemiarch	154	80	1	20	None

*intraoperative right coronary artery dissection

Conclusions:

This case series study suggests that aortic root reconstruction via right anterolateral mini-thoracotomy can be safely and effectively performed. However, this approach requires a longer learning curve and preparation time for surgeons.