

Right Anterior Minithoracotomy for Aortic Valve Replacement in Tracheostomized Patients with Aortic Valve Infective Endocarditis: The Road between Scylla and Charybdis

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INTRODUCTION

- Sternotomy in tracheostomized patients is challenging and predisposes to deep sternal wound infections.
- Alternative Approach: Right Anterior Thoracotomy (ART) for Aortic Valve Replacement (AVR) provides an alternative with reduced trauma and quicker recovery.

METHODOLOGY

Study Design: Retrospective analysis of 5 tracheostomized patients who underwent AVR for IE via ART between December 2021 – December 2023.

Surgical Approach: Small thoracotomy with a frontal view of the aortic valve using the appropriate intercostal space to enable a parallel view of the aortic valve.

RESULTS

- Patient Survival: In-hospital survival rate is 100%. No cases of paravalvular leakage or wound infection.
- Post-Operative Outcomes: Satisfactory recovery with no complications related to the approach.
- Successful Valve Replacement: All patients underwent AVR for infective endocarditis, with a favorable outcome.

Table.1 Preoperative characteristics of patients

Patient	Age (Yrs)	Sex	History of Endocarditis	Reason for Tracheostomy	Causative Microorganism	Blood Culture	Days of Antimicrobial Therapy Before Surgery
1	67	M	Yes	Ischemic stroke	MSSA	Negative	Unknown
2	78	F	No	Ischemic stroke	MRSE	Positive	Unknown
3	58	M	No	Ischemic stroke	<i>E. faecalis</i>	Positive	Unknown
4	77	F	No	ICB	MSSA	Positive	Unknown
5	81	M	Yes	ICB	MSSE	Positive	14

M: Male; ICB: Intracerebral bleeding; MSSA: Methicillin-susceptible *Staphylococcus aureus*; F: Female; Methicillin-resistant *Staphylococcus epidermidis*; Methicillin-susceptible *Staphylococcus epidermidis*

CONCLUSION

ART is a novel and effective approach that can save the lives of these high-risk patients.

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