

Endoscopic atraumatic coronary artery bypass without robotic assistance

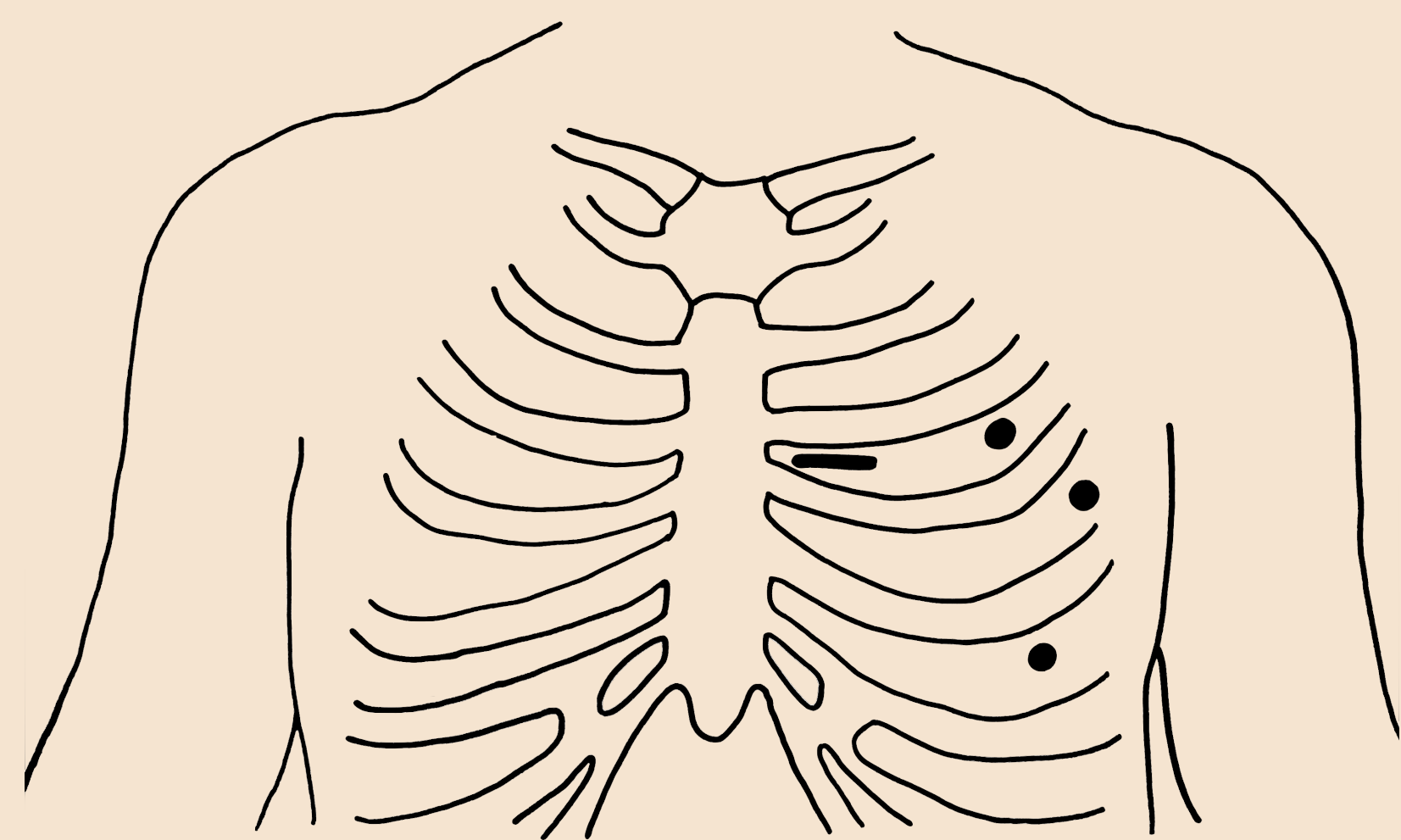
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Introduction

During **endoscopic atraumatic coronary artery bypass** (endo-ACAB), anastomosis is performed on a beating heart. This is a **technically challenging** procedure and knowledge of the clinical outcomes after this procedure is scarce.

Methods

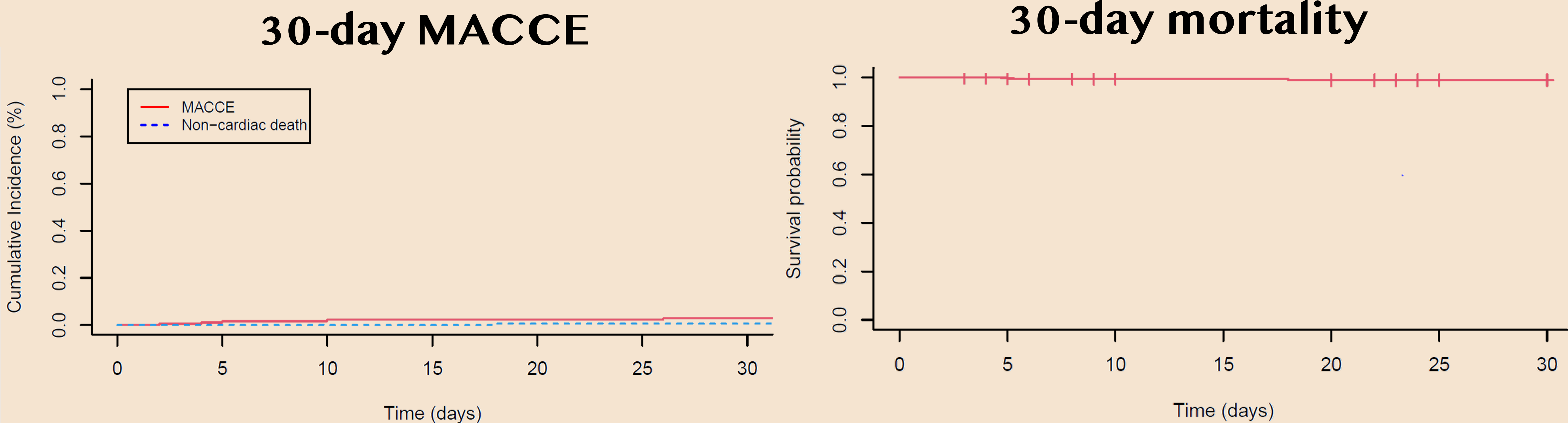
In this single-center retrospective study, 183 patients underwent endoscopic atraumatic coronary artery bypass between January 2016 and December 2021. The primary outcomes were 30-day mortality, 3-year mortality, and major adverse cardiac and cerebrovascular events (MACCE).



Three 5 mm trocars and a 30 mm utility port

Results

	MACCE	Mortality
30-day	97.2%	98.9%
3-year freedom/survival	87.9%	87.2%



Surgery time (min)	118 ± 32.64
On-pump	143 (78.57%)
Cardiopulmonary bypass time (min)	42.13 ± 22.67
Intensive care length of stay (h)	58.95 ± 151.70
Hospital length of stay (days)	5.97 ± 5.56
Graft failure	5 (2.73%)

Conclusion: The short- and midterm clinical outcomes after endoscopic atraumatic coronary artery bypass without robotic assistance show satisfactory results.