

MICS multi-vessel CABG in a low resource country: Dare to establish in government sector, my experience. Ismics2023.0a00104

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Background

MICS CABG is an advanced and safe option foe multi-vessel coronary artery bypass. Ensuring both safety and quality as like open surgery, it provides several advantages over the traditional open surgery. Like any other minimally invasive operations, it provides quicker recovery, faster healing, less blood lossless post operative pain, less wound infections and so on

Methods

A total of 75 patients were subjected to MICS CABG by a left minithoracotomy approach between 2021 and 2022. The left internal thoracic artery (LITA) harvesting, proximal, and distal anastomoses were performed under direct vision. Out of 75 patients, computed tomography coronary angiography (CTA) results were obtained for 44 patients at the end of their one year postoperative period.

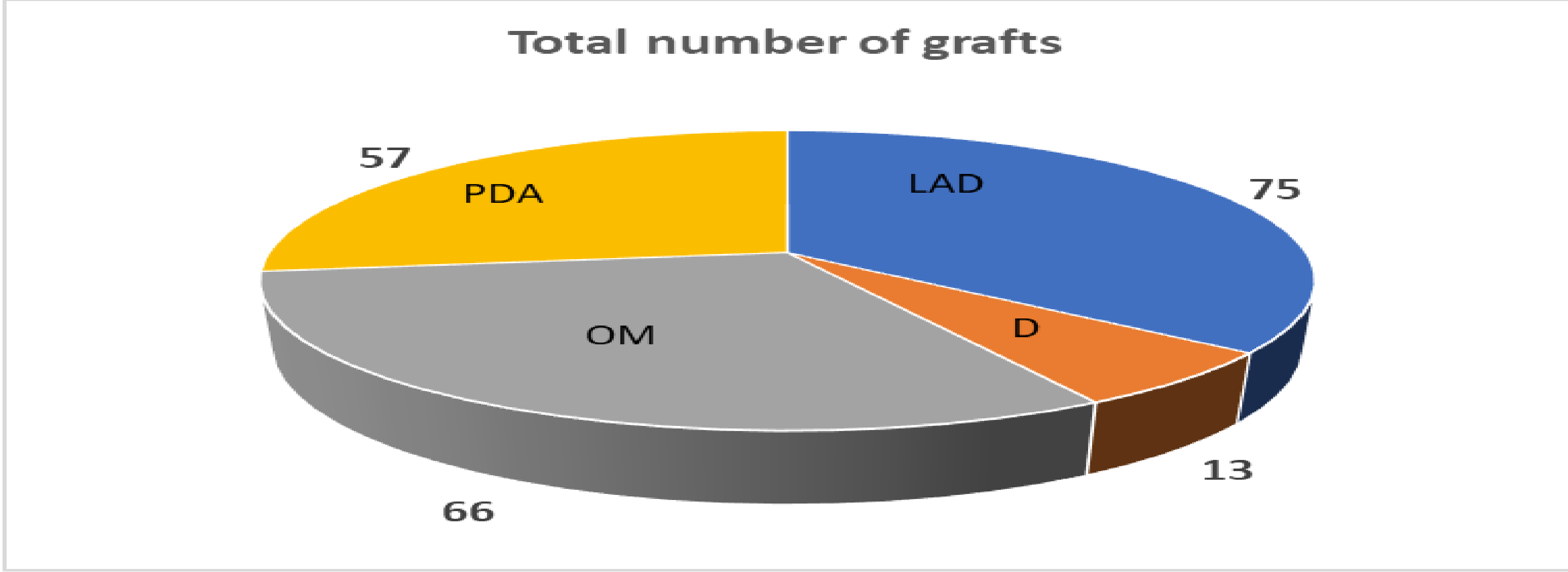
Results

All patients underwent complete revascularization. Mean number of grafts were 2.8±0.4. Conversion to sternotomy was needed for 1 (1.33%) patient. There was no perioperative mortality. All grafts were found patent at 1 year follow up on CTA.

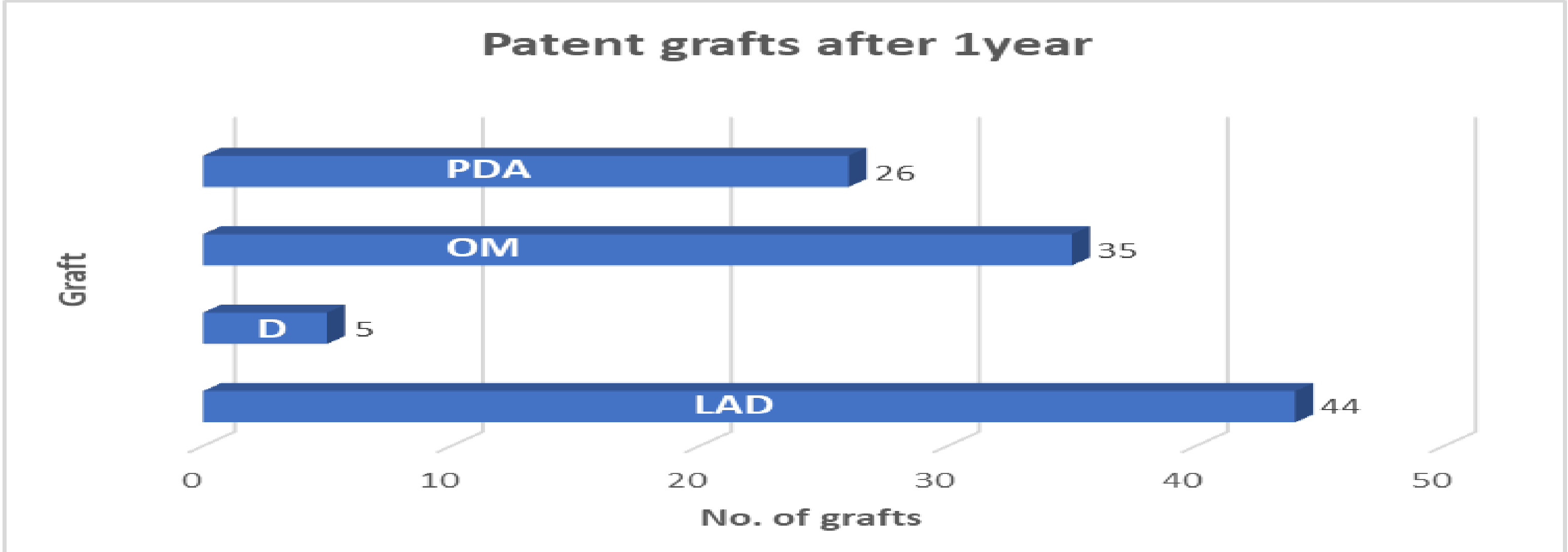
Demographic and perioperative variables

Characteristics	Value
Age (years)	52.41 ± 5.94
Male : Female	24 : 1
DM (%)	46.1 %
HTN (%)	32.9%
Distal grafts	2.8± 0.4
Duration of operation (minutes)	266.67 ± 45.7
Duration of mechanical ventilation (minutes)	312.40 ± 22.82
Post-operative ICU stay (hours)	33.25 ± 6.08
Postoperative hospital stay (days)	4.77 ± 0.75

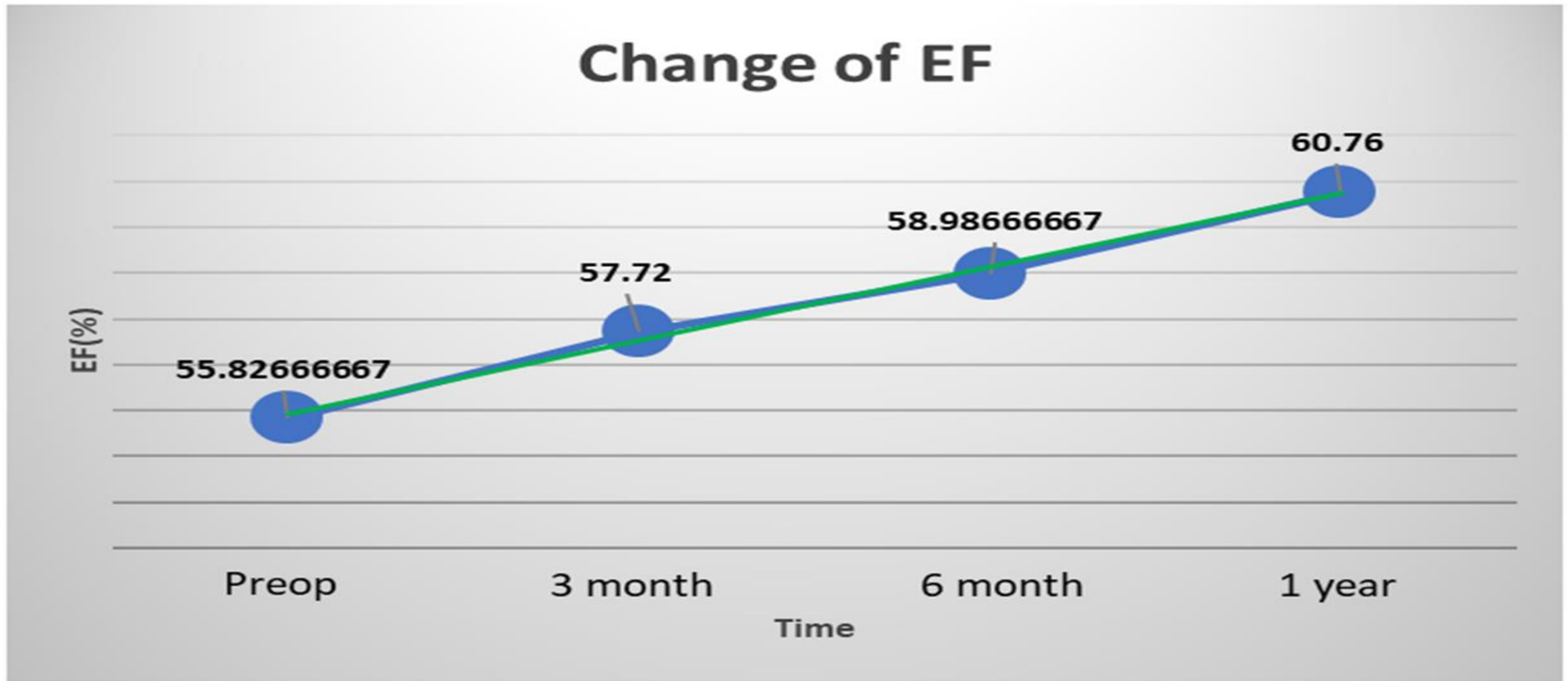
Distribution of distal grafts



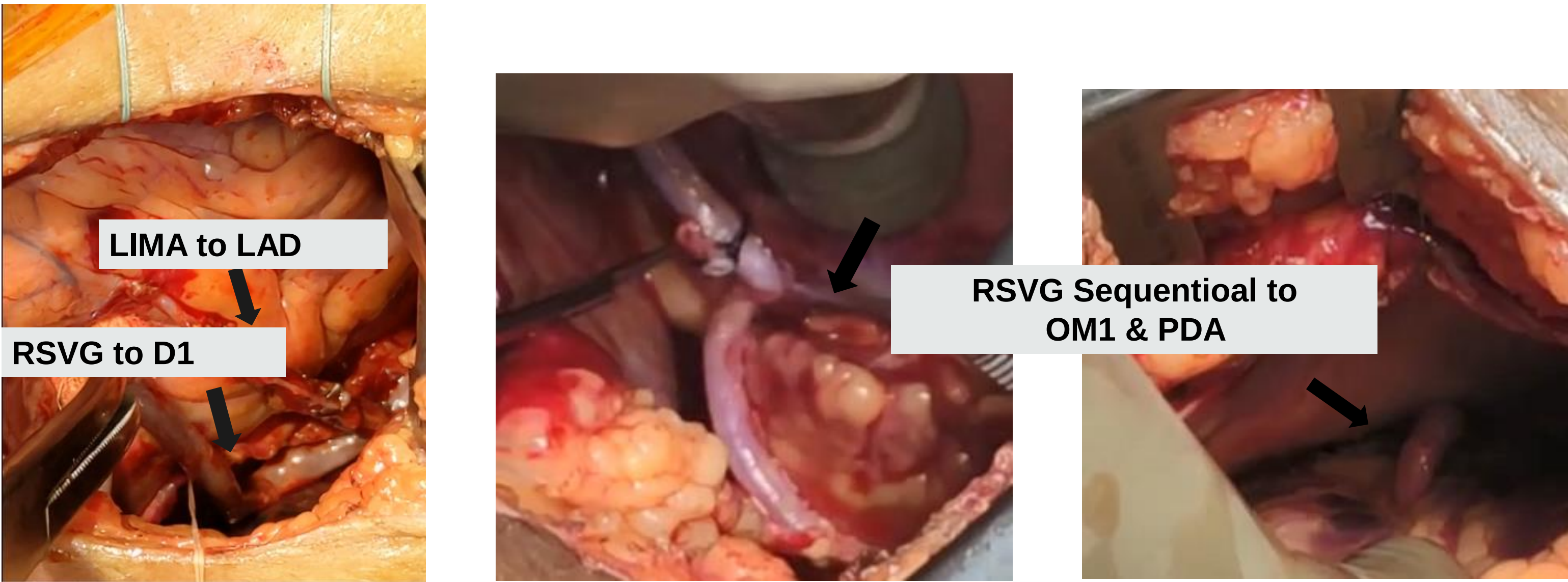
CTA findings of 44 patients



Improvement of EF in perioperative period



Procedure picture



Conclusion

In a low resource country like Bangladesh, especially in government sector, it is really difficult to establish the MICS program and run it successfully. But with the dedication and devotion of young cardiac surgeons in National Institute of Cardiovascular Diseases, Dhaka, Bangladesh, it has been proved possible ensuring the safety and quality of surgery among the poor patients seeking surgical treatment in the hospital.

Reference

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