

The Intramyocardial Left Anterior Descending Artery: Prevalence, Early and Mid-Term Surgical Outcomes After Coronary Artery Bypass Procedures: A Retrospective Single-Center Study

İntramiyokardiyal Sol Ön İnen Arter: Koroner Arter Baypas Prosedürlerinden Sonra Prevalans, Erken ve Orta Dönem Cerrahi Sonuçları: Retrospektif Tek Merkezli Çalışma

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To the Editor,

We appreciate the opportunity to respond to Dr. Sarıtaş's thoughtful letter regarding our recent publication.¹ Dr. Sarıtaş raised important points that merit further discussion.

Firstly, we acknowledge the reference to Olearchyk's work, which reported a 17.7% prevalence of intramyocardial left anterior descending artery (IMLAD), with the middle portions being the most affected. This aligns closely with our findings and underscores the variability in IMLAD presentation. The surgical approach we used, blind direct visualization, while simple, does have inherent risks such as penetration into the right ventricle and bleeding. These limitations are particularly pronounced in beating heart surgeries, as noted.

Regarding the comparison between IMLAD and non-IMLAD groups, we acknowledge that our study found no statistical significance between the two groups concerning age, co-morbidity, and the number of grafts used. This could be attributed to the relatively small sample size, which may not have provided sufficient power to detect significant differences in these variables. Additionally, the selection criteria and surgical protocols at our institution aim to standardize treatment across different patient demographics, which may have contributed to the observed homogeneity.

The discrepancy regarding longer cardiopulmonary bypass (CPB) times in the non-IMLAD group compared to the IMLAD group, despite no significant difference in cross-clamp times, can be at-

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tributed to several factors. While the presence of an IMLAD might require complex maneuvers, these are often localized and do not necessarily extend CPB time significantly. The non-IMLAD group may involve other complexities or co-morbid conditions not initially apparent in the demographic data. Additionally, the variability in surgical techniques and intraoperative management could indeed lead to differences in CPB times. Surgeons may employ different approaches to bypass grafting that influence CPB duration differently in the two groups. Moreover, individual patient factors such as vessel calcification, or unforeseen intraoperative challenges could affect CPB time. Intraoperative conditions like hemodynamic instability or the need for additional procedures might disproportionately increase CPB time in the non-IMLAD group.

In conclusion, further multi-center studies are warranted to explore the clinical implications of IMLAD and refine surgical strategies to optimize outcomes for all patients.

Thank you for your attention to this matter.

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No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Sameh Alagha; **Design:** Sameh Alagha; **Control/Supervision:** Ferit Çiçekçioğlu; **Data Collection and/or Processing:** Sameh Alagha; **Analysis and/or Interpretation:** Sameh Alagha; **Literature Review:** Sameh Alagha; **Writing the Article:** Sameh Alagha, Ferit Çiçekçioğlu; **Critical Review:** Ferit Çiçekçioğlu; **References and Fundings:** Sameh Alagha; **Materials:** Ferit Çiçekçioğlu;

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