## Additional insights into the outcomes after combined heart-lung surgery

Kombine kalp-akciğer cerrahisi sonrası sonuçlara ilave bilgiler

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Ateş et al.[1] are sincerely commended for sharing an enriching clinical experience on the outcomes of concomitant off-pump coronary artery bypass grafting (CABG) and pulmonary operations. Having said that, there exist other intricacies in the subject, necessitating discussion. To begin with, the authors did not account for preoperative left ventricular diastolic dysfunction (LVDD) in their retrospective analysis.[1] The former is difficult to overlook given the advanced age of the study participants (69.7±6.6 years) where all of the 23 patients happened to be in New York Heart Association (NYHA) functional Class III with 21 of them presenting with systemic hypertension.<sup>[1,2]</sup> In this regard, Ates et al.[1] ought to have presented the body mass index of their study participants.<sup>[1,2]</sup> It needs to be emphasized here that documenting preserved LV ejection fraction (EF); i.e., an EF in excess of 50% in the present study provides far from a holistic picture, considering the recognition of heart failure with preserved EF or heart failure with preserved ejection fraction (HFpEF) in such patients coming for CABG.[1-3] However, speaking of LVDD in relation to the present patient subset undergoing concomitant off-pump CABG and pulmonary operation, the cardiopulmonary interactions could have also likely played an important role. Meanwhile LVDD predisposes to post-capillary pulmonary hypertension (PH) or PH due to left heart disease, PH simultaneously results due to lung diseases, rendering the matter pretty much a double-trouble situation, as highlighted in

a review on PH and thoracic surgery by Nonaka et al.<sup>[4]</sup> Even in specific reference to the postoperative complications, independent researchers such as Braksator et al.<sup>[3]</sup> tend to associate LVDD with adverse respiratory outcomes following CABG, again buttressing the importance of above mentioned discussion in the context of a concurrent lung operation, as was the case in the Ateş et al. study.<sup>[1]</sup>

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## REFERENCES

- Ateş MŞ, Demirözü ZT, Erus S, Aksoy E, Özer KB, Gürkahraman S, et al. The outcomes of concomitant offpump coronary artery bypass grafting and pulmonary operations. Turk Gogus Kalp Dama 2025;33:46-56. doi: 10.5606/tgkdc.dergisi.2025.26778.
- Lewandowski D, Yang EY, Nguyen DT, Khan MA, Malahfji M, El Tallawi C, et al. Relation of left ventricular diastolic function to global fibrosis burden: Implications for heart failure risk stratification. JACC Cardiovasc Imaging 2023;16:783-96. doi: 10.1016/j. jcmg.2022.12.027.
- 3. Braksator M, Jachymek M, Witkiewicz K, Witkiewicz W, Peregud-Pogorzelska M, Kotfis K, et al. The impact

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- of left ventricular diastolic dysfunction on respiratory adverse events in cardiac surgery patients-an observational prospective single-center study. J Clin Med 2023;12:4960. doi: 10.3390/jcm12154960.
- 4. Nonaka DF, Grichnik KP, Whitener GB. Pulmonary hypertension and thoracic surgery: Diagnostics and advances in therapy and intraoperative management. Curr Anesthesiol Rep 2014;4:135-41. doi: 10.1007/s40140-014-0053-x.