



Contents lists available at ScienceDirect

Journal of Pediatric Surgery

journal homepage: www.sciencedirect.com/journal/journal-of-pediatric-surgery

Correspondence

Letter to the Editor in Response to: Short- and Long-Term Outcomes of Thoracoscopic and Open Repair for Esophageal Atresia and Tracheoesophageal Fistula

Dear Editor,

We have read with interest the study of Yalcin, et al., titled “Short- and Long-Term Outcomes of Thoracoscopic and Open Repair For Esophageal Atresia and Tracheoesophageal Fistula”, in which they published their esophageal atresia experiences [1].

The article by Yalcin et al. provides a comprehensive analysis of the short- and long-term outcomes of thoracoscopic versus open repair in patients with esophageal atresia and tracheoesophageal fistula (EA/TEF). This retrospective cohort study, encompassing two decades of data, offers valuable insights into the efficacy and safety of these surgical techniques.

The authors' data cover the years 2000–2020. Although recent meta-analyses have not shown significant results regarding anastomotic stricture and anastomotic leak, they recommend preserving the azygos vein to reduce the risk of pneumonitis. I would like to ask the authors whether they have preserved the azygos vein in cases since 2020? It appears from the study that, up until 2020, the azygos vein was transected in all patients.

Although the authors have discussed long-term outcomes, the study does not report on “musculoskeletal anomalies after EA repair,” a topic that has recently gained significant attention. Studies by Aubert et al. [2], Borselle et al. [3], and Hattori et al. [4] have reported lower rates of scoliosis in the thoracoscopic (TR) group. Similarly, these studies found significantly lower rates of rib deformity in the TR group. Our unpublished meta-analysis revealed that the TR group had a significantly lower scoliosis rate compared to the conventional open repair (COR) group ($I^2 = 36%$) (RR: 0.35, 95% CI: 0.14 to 0.84; $p = 0.02$). The overall scoliosis rates in the TR and COR groups were 3.1% and 16%, respectively (Fig. 1). Additionally, our unpublished meta-analysis found that the TR group had significantly lower rib deformity rates compared to the COR group ($I^2 = 0%$) (RR: 0.05, 95% CI: 0.01 to 0.25; $p = 0.0002$). The overall rib deformity rates were 0% in the TR group and 41.5% in the COR group (Fig. 2).

I would like to ask Yalcin et al. whether they have evaluated long-term musculoskeletal complications, such as scoliosis and rib deformity, which are quite common after thoracotomy. If they

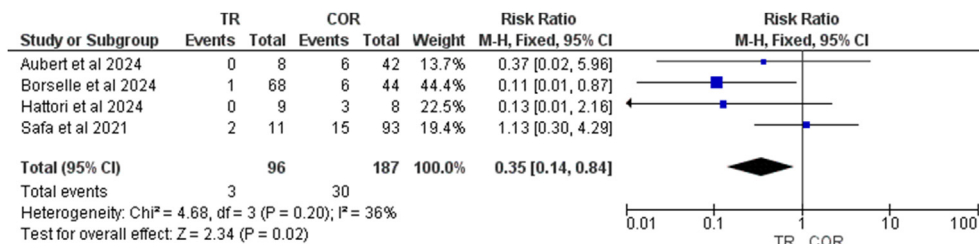


Fig. 1. Forest plot of scoliosis rate comparing thoracoscopy and COR.

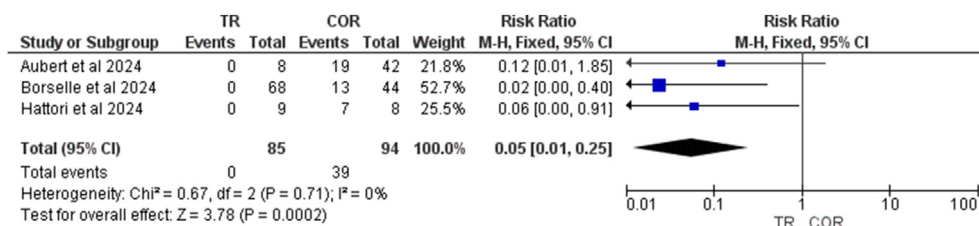


Fig. 2. Forest plot of rib deformity rate comparing thoracoscopy and COR.

<https://doi.org/10.1016/j.jpedsurg.2024.161690>

0022-3468/© 2024 Elsevier Inc. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

have, publishing their data would provide valuable evidence and contribute to a more rigorous meta-analysis on this subject.

Funding

None.

Conflicts of interest

None.

Acknowledgments

None.

References

- [1] Yalcin Sule, Bhatia Amina M, He Zhulin, Wulkan Mark L. Short- and long-term outcomes of thoracoscopic and open Repair For esophageal atresia and tracheoesophageal fistula. *J Pediatr Surg* 2024. <https://doi.org/10.1016/j.jpedsurg.2024.08.002>.
- [2] Aubert O, Lacher M, Mayer S, Frahm J, Voit D, Rosolowski M, Widenmann A, Hirsch FW, Gräfe D. Increased musculoskeletal deformities and decreased lung volume in patients after Ea/Tef repair - a real-time Mri study. *Ann Surg* 2024 Feb;8. <https://doi.org/10.1097/SLA.0000000000006193>. Epub ahead of print. PMID: 38328992.
- [3] Borselle D, Grochowski K, Gerus S, Międzybrodzki K, Koltowski K, Jasińska A. Thoracic musculoskeletal deformities following surgical treatment of esophageal atresia - thoracoscopic versus open approach: a retrospective two centers cohort study. *J Pediatr Surg* Mart 2024;59(9):1719–24. S0022346824001751.
- [4] Hattori K, Kawashima H, Ishimaru T, Yanagida Y, Miyake K, Iguchi M, Oiki H, Maeda S, Ihara Y. Musculoskeletal deformities after thoracoscopic versus conventional open repair for esophageal atresia. *Asian J Surg* 2024 Feb;47(2):

968–72. <https://doi.org/10.1016/j.asjsur.2023.11.043>. Epub 2023 Nov 28. PMID: 38030485.

Mustafa Azizoglu^{*1}

Esenyurt Hospital Department of Pediatric Surgery, Istanbul, Turkey

Istinye University, Faculty of Health Sciences, Department of Stem Cell and Tissue Engineering, Istanbul, Turkey

Pediatric Surgery Meta-Analysis Study Group (PeSMA), Turkey

Sergey Klyuev

Pediatric Surgery Meta-Analysis Study Group (PeSMA), Turkey

Department of Pediatric Surgery, AO GK MEDSI, 102151 Moscow, Russia

Secil Yuksel, Tuba Erdem Sit, Esra Karakas

Pediatric Surgery Meta-Analysis Study Group (PeSMA), Turkey

Çam and Sakura City Hospital, Department of Pediatric Surgery, Istanbul, Turkey

Toni Risteski

Pediatric Surgery Meta-Analysis Study Group (PeSMA), Turkey

Department of Pediatric Surgery, Medical Faculty, Ss. Cyril and Methodius University of Skopje, 1020 Skopje, North Macedonia

* Corresponding author. Esenyurt Hospital, Department of Pediatric Surgery, Istanbul, Turkey. Tel.: +90 544 744 82 44. E-mail address: mdmazizoglu@gmail.com (M. Azizoglu).

8 August 2024

¹ **PESMA Study Group:** Pediatric Surgery Meta Analysis Study Group (PeSMA) is a study group comprising over 50 researchers from more than 15 different countries, dedicated to conducting meta-analysis studies in pediatric surgery field. To join our study group, please email us at pesmastudy@gmail.com.