

Reply to Chandrasekhara and Aggarwal



First and foremost, we express heartfelt appreciation to Aggarwal M et al for their comments related to the systematic review and meta-analysis evaluating the role of radiofrequency ablation (RFA) for management of malignant biliary obstruction (MBO). The insights provided by the authors deserve to be clarified. It is clear that the authors performed a detailed evaluation of the systematic review and meta-analysis [1], demonstrating the importance of this topic.

As reported in this systematic review and meta-analysis [1], there is a lack of robust evidence available in the literature. The aim of the study was to improve the quality of evidence of the limited available data, as underscored in the article. This publication may encourage more elaborate trials to enhance the quality of evidence.

Even though our meta-analysis included only randomized controlled trials (RCTs) (evidence 1A), it is not exempt from limitations, as reported in the discussion section of the study.

The high heterogeneity of the meta-analysis is the main limiting factor. This is related to several factors, such as small sample size of the published RCTs, different disease stages, stent types, and biliary access routes. In addition, there is a lack of information regarding the length and etiology of MBO. In an attempt to reduce the heterogeneity of the results, previous meta-analyses [2,3,4,5,6] included non-RCTs to increase the sample size. However, that measure does not increase the quality of evidence and should be evaluated with caution.

Unfortunately, the RCT recently published by Jarosova J et al [7] was not available at the time of the submission of our study, and thus, could not be included. In an attempt to provide more quality data, multiple subanalyses were performed, including stent types, treatment regimens, MBO etiologies, and stricture locations. The decision to include different biliary access routes (percutaneous and

endoscopic) was based on the fact that the main outcomes of RFA (stent patency and overall survival) are not altered by the route, except for the rate of adverse events.

It is critical to clarify all raised concerns about the data included in the meta-analysis [1]. The concerns about data collection from the manuscript published by Albers D et al [8] is reasonable. The data included in the meta-analysis [1] were collected from the results provided in the text of the manuscript and not from the figures [8]. Therefore, despite the valuable points raised in the letter to review, it is important to state that the results of the systematic review and meta-analysis can be trusted.

Once again, we thank the authors for the valuable comments. We hope this discussion encourages more quality studies to better understand the role of RFA for MBO.

Conflict of Interest

Dr. Diogo Turiani Hourneaux De Moura: BariaTek Medical - Advisory Board Member (Consulting fees). This was not relevant to this study. Dr. Eduardo Guimaraes Hourneaux De Moura: Olympus - Consultant (Consulting fees) and Boston Scientific - Consultant (Consulting fees). These were not relevant to this study. The other authors declare no conflicts of interest.

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References

- [1] Veras MdO, de Moura DTH, McCarty TR et al. Intraductal radiofrequency ablation plus biliary stent versus stent alone for malignant biliary obstruction: a systematic review and meta-analysis. *Endosc Int Open* 2024; 12: E1–E2
- [2] Zheng X, Bo ZY, Wan W et al. Endoscopic radiofrequency ablation may be preferable in the management of malignant biliary obstruction: A systematic review and meta-analysis. *J Dig Dis* 2016; 17: 716–724 doi:10.1111/1751-2980.12429
- [3] Sofi AA, Khan MA, Das A et al. Radiofrequency ablation combined with biliary stent placement versus stent placement alone for malignant biliary strictures: a systematic review and meta-analysis. *Gastrointest Endosc* 2018; 87: 944–951e1
- [4] Cha BH, Jang MJ, Lee SH. Survival benefit of intraductal radiofrequency ablation for malignant biliary obstruction: a systematic review with meta-analysis. *Clin Endosc* 2021; 54: 100–106 doi:10.5946/ce.2020.254
- [5] de Jong DM, Fritzsche JA, Audhoe AS et al. Comparison of intraductal RFA plus stent versus stent-only treatment for unresectable perihilar cholangiocarcinoma-A systematic review and meta-analysis. *Cancers (Basel)* 2022; 14: 2079 doi:10.3390/cancers14092079
- [6] Song S, Jin H, Cheng Q et al. Local palliative therapies for unresectable malignant biliary obstruction: radiofrequency ablation combined with stent or biliary stent alone? An updated meta-analysis of nineteen

trials Surg Endosc 2022; 36: 5559–5570
doi:10.1007/s00464-022-09181-2

- [7] Jarosova J, Zarivnijova L, Cibulkova I et al. Endoluminal radiofrequency ablation in patients with malignant biliary obstruction: a randomised trial. *Gut* 2023; 72: 2286–2293
- [8] Albers D, Schmidt A, Schiemer M et al. Impact of endobiliary radiofrequency ablation on biliary drainage in patients with malignant biliary strictures treated with uncovered selfexpandable metal stents: a randomized controlled multicenter trial. *Gastrointest Endosc* 2022; 96: 970–979

Bibliography

Endosc Int Open 2024; 12: E640–E641

DOI 10.1055/a-2295-3143

ISSN 2364-3722

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70469 Stuttgart, Germany

