








GLP-1 Agonists and the Risk of Pulmonary Aspiration during Elective Upper Endoscopy: A Systematic Review and Meta-analysis



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Received: December 26, 2024

Revised: April 12, 2025

Accepted: April 30, 2025

Published: ?? ??, 2025

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Cite as: Elmati P, Jagirdhar G, Qasba R, Perez A, Qasba R, Bains Y, Shah M, Surani S. GLP-1 Agonists and the Risk of Pulmonary Aspiration during Elective Upper Endoscopy: A Systematic Review and Meta-analysis. Open Respir Med J, 2025; 19: e18743064372550. <http://dx.doi.org/10.2174/0118743064372550250603061720>



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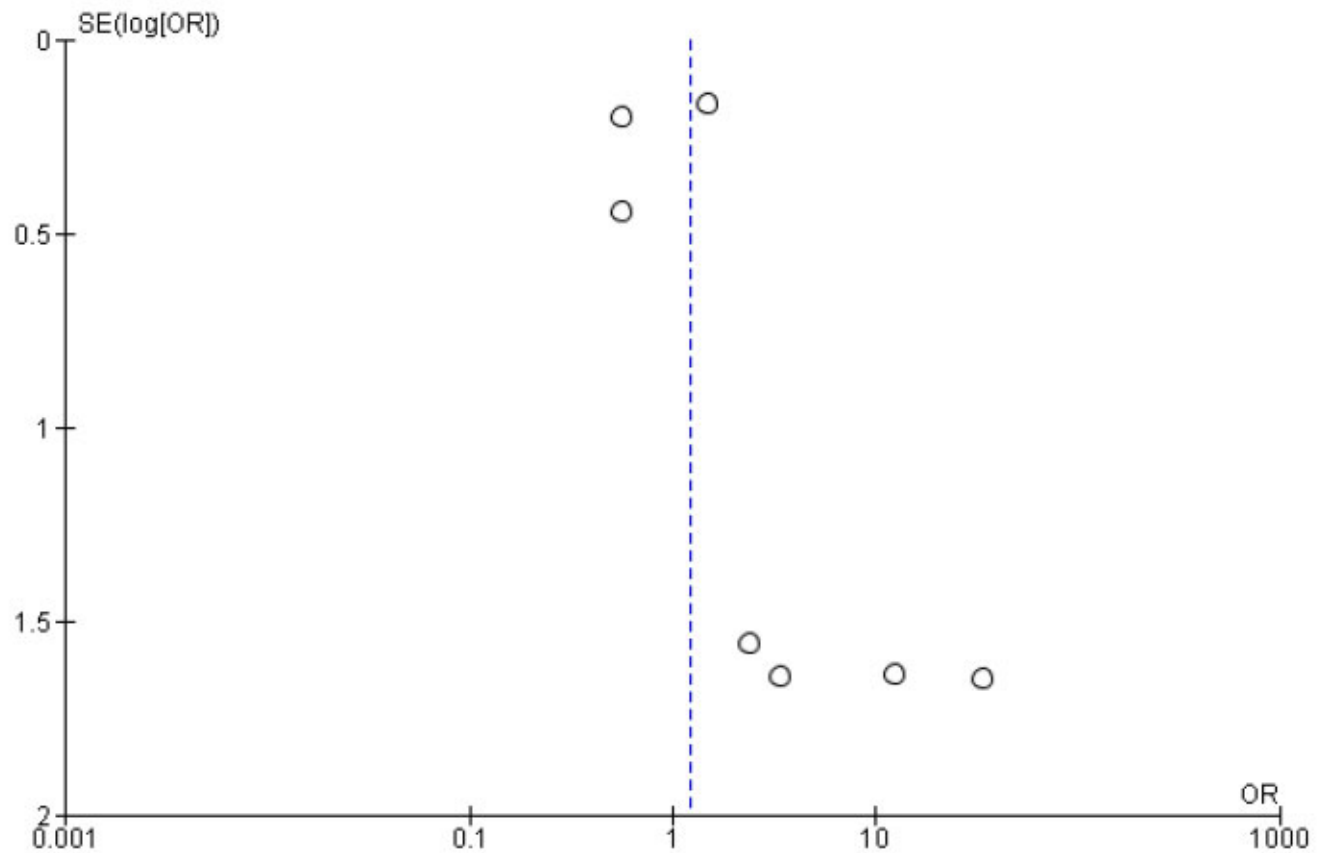


Fig. (S1). Publication Bias for Pulmonary aspiration in patients on GLP1 agonists and Placebo Meta-analysis (A higher resolution / colour version of this figure is available in the electronic copy of the article).

| Author | Were patient's demographic characteristics clearly described? | Was the patient's history clearly described and presented as a timeline? | Was the current clinical condition of the patient on presentation clearly described? | Were diagnostic tests or assessment methods and the results clearly described? | Were the definitions, inclusion and exclusion criteria, algorithms or processes used to identify or select cases and controls valid, reliable, and implemented consistently across all study participants? | Was the intervention(s) or treatment procedure(s) clearly described? | Was the post-intervention clinical condition clearly described? | Was there use of concurrent controls? | Were adverse events (harm) or anticipated events identified and described? | Does the case report provide take-away lessons? |
|---------|---|--|--|--|--|--|---|---------------------------------------|--|---|
| Fujino | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Gulak | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Kein | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ |
| Queiroz | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Avraham | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Fig. (S2). Quality assessment of the studies based on the Joanna Briggs Institute (JBI) critical appraisal checklist for case reports. (A higher resolution / colour version of this figure is available in the electronic copy of the article).

| Author, year | Was the research question clearly stated | Was the study population clearly specified and defined | Was participation rate of eligible person at least 5% | Were all the subjects selected or recruited from the same or similar populations | Was a sample size justification, power description, or variance and effect estimate provided | When the exposure (s) of interest measured prior to the outcome(s) being measured | Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome | Did the study examine different levels of the exposure as related to the outcome | Were the exposure measures clearly defined, valid, reliable, and implemented consistently across all study participants | Was the exposure measured more than once over time | Were the outcome measures clearly defined, valid, reliable, and implemented consistently across all study participants | Were the outcome measures blinded to the exposure status of participants | Was loss to follow-up after baseline 20% or less | Were key potential confounding variables identified and adjusted statistically for their impact on the relationship between exposure (s) and outcome(s) |
|----------------|--|--|---|--|--|---|---|--|---|--|--|--|--|---|
| Amirloo, 2023 | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ | ✗ | ✗ | ✗ |
| Barlowe, 2024 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ | ✗ | ✗ | ✓ |
| Fifkins, 2024 | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ | ✗ | ✓ | ✗ |
| Ganahdaz, 2024 | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ | ✗ |
| Kurina, 2024 | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✗ | ✗ |
| Maselli, 2024 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✗ | ✗ |
| Nadeem, 2024 | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✗ | ✓ |
| Silveira, 2023 | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✗ | ✗ |
| Wu, 2024 | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✗ | ✗ |
| Yeo | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✗ | ✗ |
| Zafar, 2024 | ✓ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✗ | ✓ |

Fig. (S3). Quality assessment of the studies based on the National Institute of health quality appraisal tool for cohort and cross-sectional studies. (A higher resolution / colour version of this figure is available in the electronic copy of the article).

| | Was the research question or objective in this paper clearly stated and appropriate | Was the study population clearly specified and defined | Did the authors include a sample size justification | Were controls selected or excluded from the same or similar population that gave rise to the cases (including the same timeframe) | Were the definitions, inclusion and exclusion criteria, algorithms or processes used to identify or select cases and controls valid, reliable and implemented consistently across all study participants | Were the cases clearly defined and differentiated from controls | If less than 100 percent of eligible cases and/or controls were selected for the study, were the cases and/or controls randomly selected from those eligible | Was there use of concurrent controls | Were the investigators able to confirm that the exposure/risk occurred prior to the development of the condition or event that defined a participant as a case | Were the measures of exposure/risk clearly defined, valid, reliable and implemented consistently across all study participants | Were the assessments of exposure/risk blinded to the case or control status of participants | Were key potential confounding variables measured and adjusted statistically in the analyses, if matching was used, did the investigation account for matching during study analysis |
|-------------|---|--|---|---|--|---|--|--------------------------------------|--|--|---|--|
| Garza, 2024 | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✗ | ✗ | ✗ | ✓ | ✗ | ✗ |

Fig. (S4). Quality assessment of the studies based on the National Institute of health quality appraisal tool for Case control studies. (A higher resolution / colour version of this figure is available in the electronic copy of the article).

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