

SAFETY AND EFFICACY OF USING PRONE POSITION VS LEFT LATERAL IN ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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BACKGROUND

- The prone position is the most frequently used because it provides better visualization and easier cannulation of the pancreatic and CBD
- However, it is not the optimal position for patients with limited cervical mobility, severe abdominal distention, ascites, late pregnancy, Parkinson and other conditions that limit the patient movement

AIM

- We aim to compare the safety and efficacy of the utilization of prone position compared to the left lateral decubitus position in ERCP undergoing patients.

METHODS

- Search engines: PubMed, Web of Science, Scopus, and Cochrane Library.
- Data collection: Inception till May 2022.
- Selection Criteria: relevant clinical trials and excluded observational studies
- Outcomes: Biliary cannulation success, Pancreatic duct Cannulation time, Overall adverse events, Pancreatitis, Bleeding, Cardiopulmonary event, Procedure time, and Ampullary localization time

- We performed the analysis of homogeneous data under the fixed-effects model, while analysis of heterogeneous data was analyzed under the random-effects model.
- RevMan Software to perform the analysis and assessed the heterogeneity using the I² statistic.

RESULTS

- Studies Included: 5
- The pooled analysis showed that the prone position was associated with higher success rate of biliary cannulation success and faster localization of the ampulla (RR=1.08 [1.03, 1.14], (P = 0.001) and (MD=-0.52 [-1.01, -0.02], (P = 0.04), respectively.
- There is no significant difference between both groups regarding the pancreatic duct Cannulation time (MD=-0.49 [-1.06, 0.08], (P = 0.09).
- Overall adverse events (RR= 0.79 [0.59, 1.06], (P = 0.12), Pancreatitis (RR= 1.36 [0.61, 3.06], (P = 0.45), Bleeding (RR=1.02 [0.34, 3.01], (P = 0.98), Cardiopulmonary event (RR=1.06 [0.35, 3.23], (P = 0.92), and Procedure time (MD=-1.08 [-3.79, 1.62], (P = 0.43).

CONCLUSION

- We concluded that the left lateral position was associated with a lower rate of successful common bile duct cannulation than the prone position in ERCP.

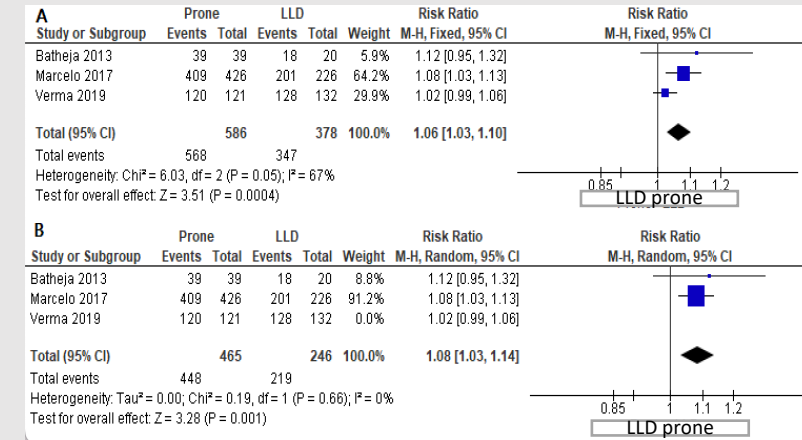


Figure 1: Forest plot for Biliary Cannulation

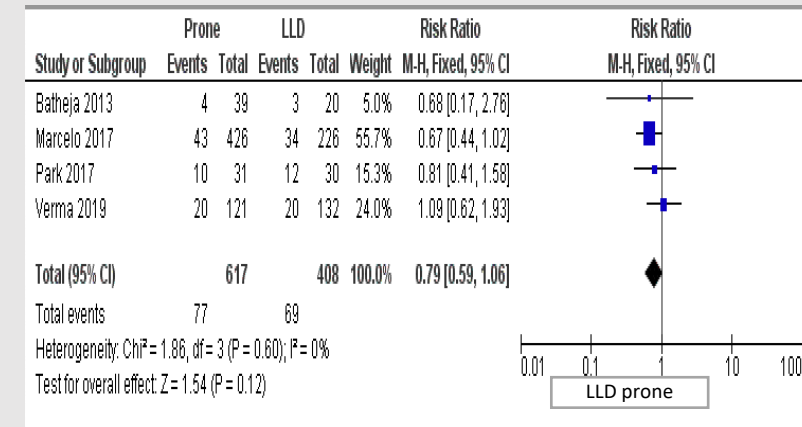


Figure 2: Forest plot for Overall adverse events