Radiofrequency ablation with Stent vs. Stent-only for Biliary drainage in patients with Malignant Biliary Strictures: A Systemic Review and Meta-Analysis

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Introduction

• Cholangiocarcinoma and pancreatic adenocarcinoma are major causes of malignant biliary strictures.

• Palliative stent placement is the general management strategy for biliary drainage in this patient population.

• Radiofrequency ablation is performed by using Habib catheter.

•Aim: Assess efficacy and safety of RFA with biliary stenting compared to stent alone in patients with malignant biliary strictures

Methods

• Study: Systematic review and meta-analysis.

• Prisma Guidelines.

• Database: PUBMED/MEDLINE, and Embase, web of science, Cochrane library.

• Population: Patients with unresectable malignant biliary strictures.

• Intervention: RFA ablation with stenting Vs. Stenting alone.

• Outcomes:
1 Mean difference in stent patency and overall survival days between the two group.
2 Adverse events between the two groups.

Results

• A total of 13 studies with 1339 patients were included.

• Pooled mean difference in stent patency was 43.50 days.

• Pooled mean difference in overall survival was 90.53 days.

• No difference in the pooled adverse events between the two groups OR 1.07 (95% CI, 0.80-1.34)

Results (cont)

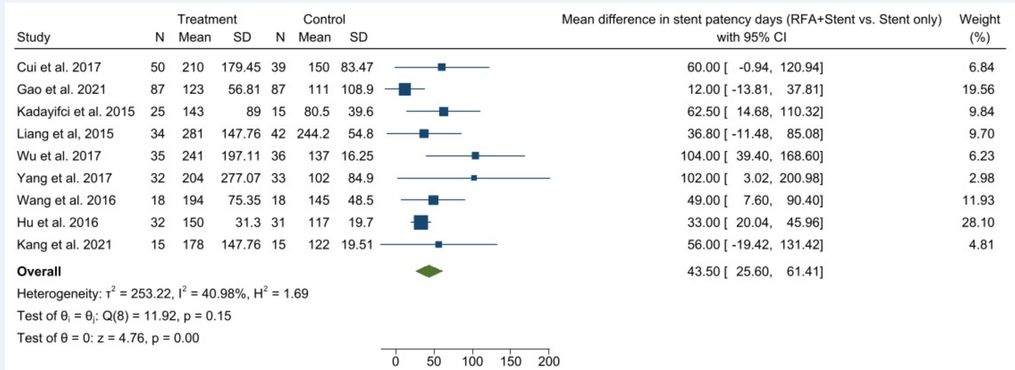


Figure 1. Forest plot of weighted pooled mean diffirence in stent patency days b/w two groups

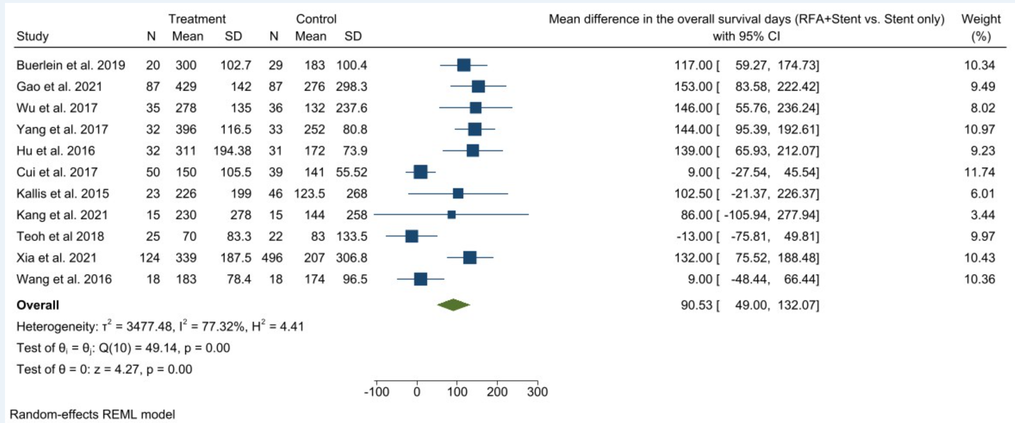
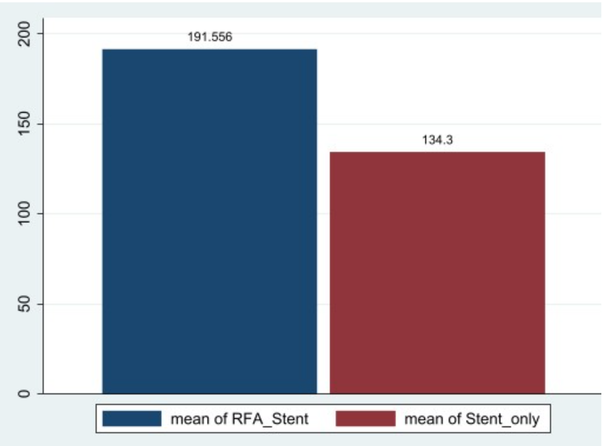
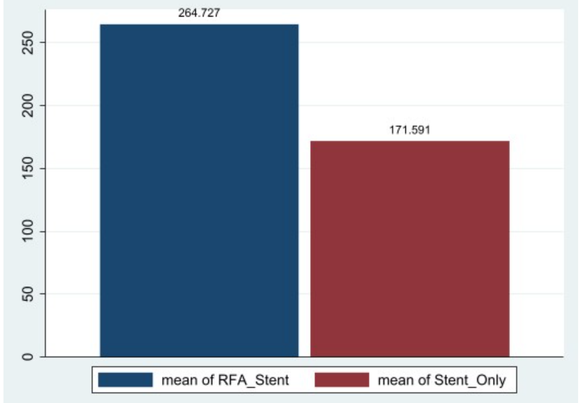


Figure 2. Forest plot of the weighted pooled mean difference in the overall survival days .

Results (cont)





Conclusions

• Radiofrequency ablation along with stenting is safe and is associated with improved stent patency and overall patient survival in malignant biliary strictures.

Presenter's Bio and References