

## ABSTRACT

Endoscopic ampulectomy has been performed for many years now. It has been questioned for its ability to resect lesions due to concerns linked with sub optimal oncological clearance. This study aims to investigate the ability of endoscopic ampullectomy to achieve complete resection of the ampullary lesions.

#### CONTACT

Sushant Chaudhary MD
St Mary's Hospital, Waterbury, CT
sushantchaudhary2008@gmail.com
Phone: (203) 502 9287

# Endoscopic ampullectomy - Where do we stand today?

Sushant Chaudhary, MD¹; Subhash Chander, MD²; Syed Hassan Abbas, MD¹; Syed Jaan Naqvi, MD¹; Carol A. Petruff, MD³; Praneet Wander, MD¹.

¹Saint Mary's Hospital, ²Mount Saini hospital, ³Saint Francis hospital

#### INTRODUCTION

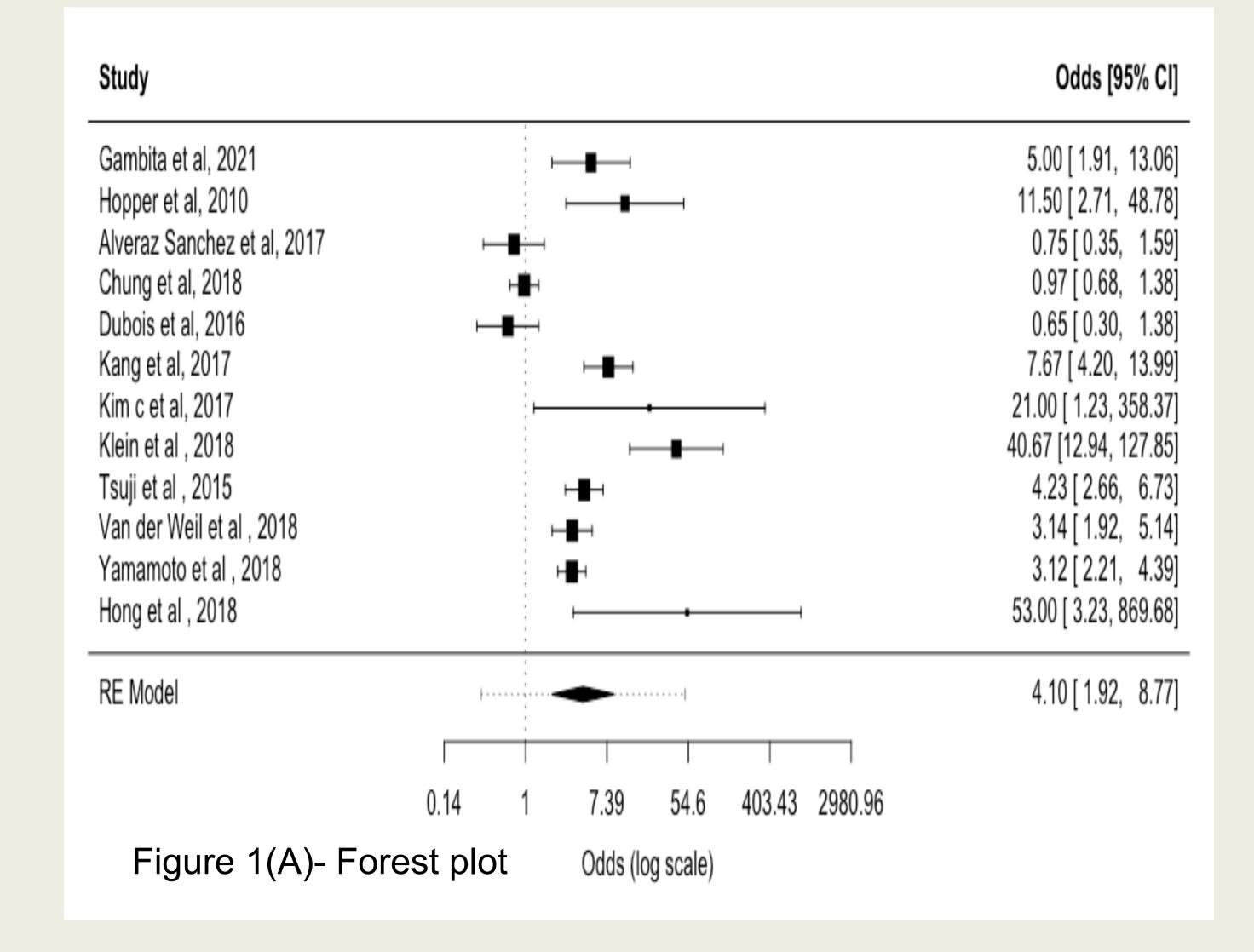
- The first endoscopic ampullectomy was done in 1983 by Suzuki et al.
- Over the years, endoscopy has evolved and better optics, narrow band imaging makes endoscopy more than just a tool to visualize lesion. It allows lesion characterization and offers diagnostic and therapeutic tools.
- This accompanied by better patient selection has made endoscopic treatment of ampullary lesions with curative intent possible without the associated morbidity and mortality that comes with surgery. This is true even in some cases with laterally spreading lesions and in patients with familial adenomatous polyposis.
- Despite this, is endoscopic management of papillary lesions the standard of care?

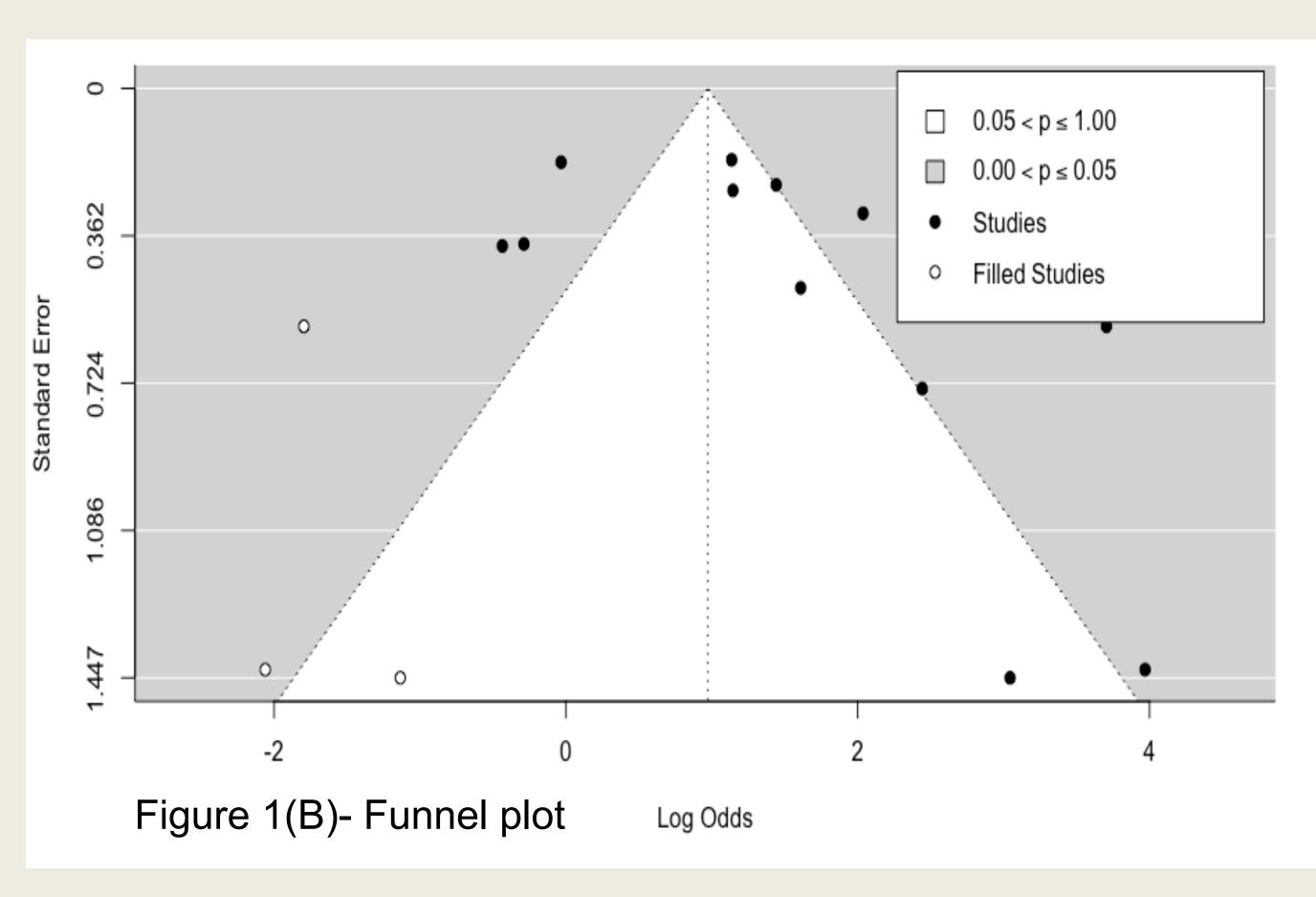
## METHODS AND MATERIALS

- We reviewed literature on Pubmed using search terms "endoscopic ampullectomy", "endoscopic papillectomy", "ampullectomy".
- 21 articles were found on Pubmed.
- Of the 21 articles we found two articles that were related to endoscopic ampullectomy.
- Two articles based on the gastroenterologist's experience and one was a meta analysis comparing differences between endoscopic ampullectomy, surgical ampullectomy and Whipple( Hiese et el).
- Using the meta analysis done by Hiese et al, we obtained more studies which were published after 2010.
- The twelve studies were identified which included 877 patients who underwent endoscopic ampullectomy.
- A pooled odd's ratio was then computed using statistical software "R" version 4.2.0, with the metafor package.

#### **RESULTS**

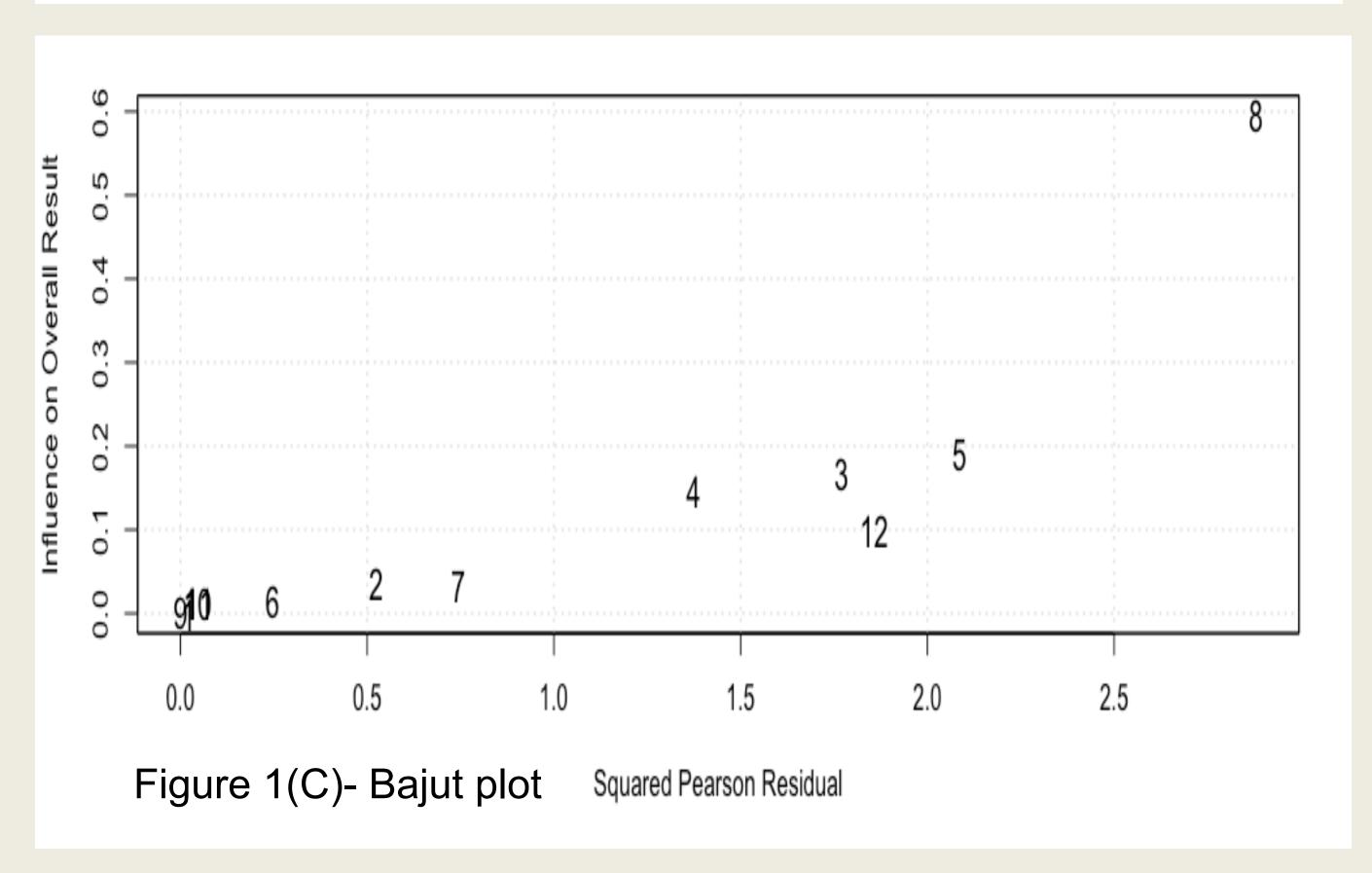
- 674 patients out of a total of 877 patients underwent complete resection without need for any additional treatment.
- A pooled Odd's ratio[95%CI] of 4.10[1.92-8.77] was computed Figure 1(A)
- No significant publication bias was noted as shown in Figure 1(B).
- One of the study by Klein et al was identified as an outlier and an influencer Figure 1(C).





### **DISCUSSION**

- Endoscopic ampullectomy is effective in complete resection of ampullary lesions with average odds of successful resection of 4.
- The European society of gastrointestinal endoscopy(ESGE) and the Japanese Gastroenterological Endoscopy society(JGES) have established guidelines for patient selection for endoscopic ampullectomy but similar recommendations from the American society of gastroenterology are lacking.
- The limitations of this study
- Missing information on the nature of lesions and the size of lesions.
- The duration of follow up was not mentioned in most studies.
- Unlike the JGES, the definition of complete resection was not defined in any study.
- The heterogeneous nature of the included studies, with inclusion of laterally spreading lesions, suggest an overall favorable outlook.



## CONCLUSIONS

- Endoscopic ampullectomy allows successful resection of the ampullary lesions.
- Like ESGE and the JGES, the American society of gastroenterology needs to establish guidelines on patient selection for endoscopic ampullectomy.