

# Small Bowel Capsule Endoscopy Utility in Patients With High Suspicion of Inflammatory Bowel Disease After Negative MRE/CTE

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## Background

- Patients with a high suspicion of inflammatory bowel disease (IBD) routinely undergo magnetic resonance enterography (MRE) and computed tomography enterography (CTE).
- Video capsule endoscopy (VCE) is an additional tool used by clinicians to visualize the small bowel for IBD.
- How VCE is utilized by clinicians in combination with MRE/CTE is not well defined.
- In this study, we sought to assess the utility of VCE in patients being evaluated for IBD following a normal MRE and/or CTE.

## Methods

- We performed a retrospective review of VCE using a tertiary-care center's PillCam database from 8/3/2018-8/18/2021.
- Patients undergoing VCE for the evaluation and diagnosis of IBD were included.
- We then reviewed these patients' charts to investigate whether or not a MRE or CTE was performed within 1 year of VCE.

## Results

Patient Demographics	
Number of Patients	83
Number of VCE Procedures	87
Patients with Two VCE Procedures	4
Sex	57% Female, 43% Male
Average Age in Years	41.8 [range 20-75]
MRE Procedures	14
Average Time to VCE from MRE	120 days
CTE Procedures	7
Average Time to VCE from CTE	148 days

Table 1. Baseline patient demographics

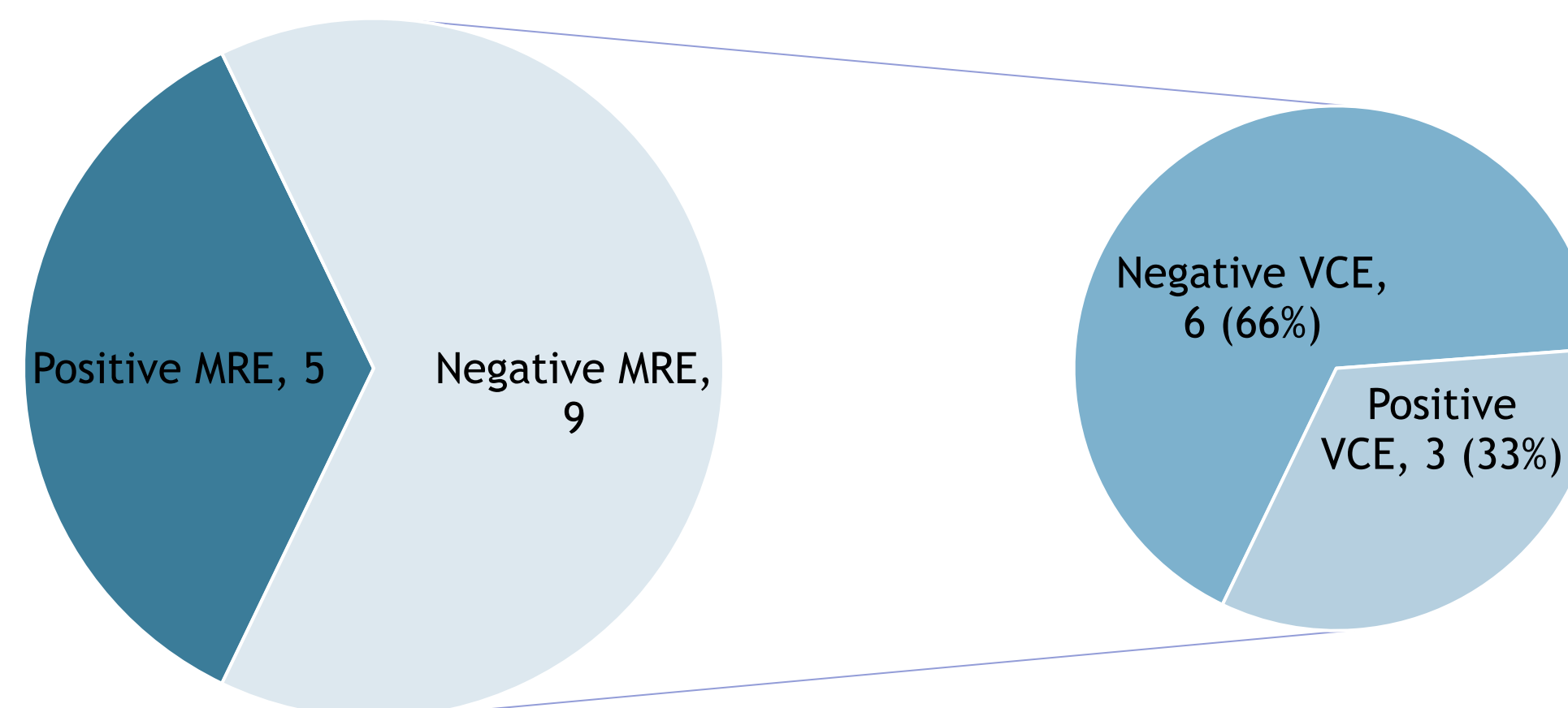


Figure 1. Outcomes of patients undergoing MRE for IBD-related small bowel evaluation

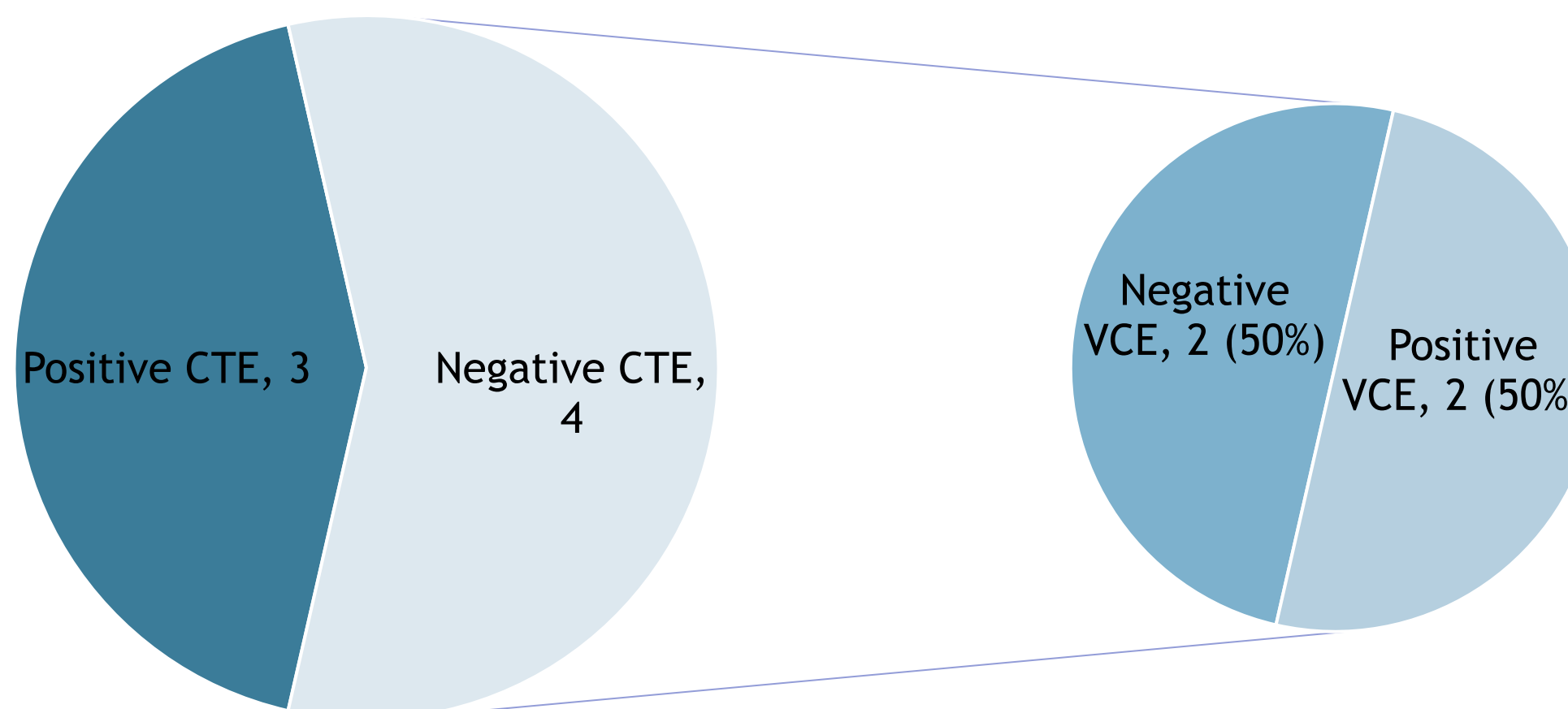


Figure 2. Outcomes of patients undergoing CTE for IBD-related small bowel evaluation

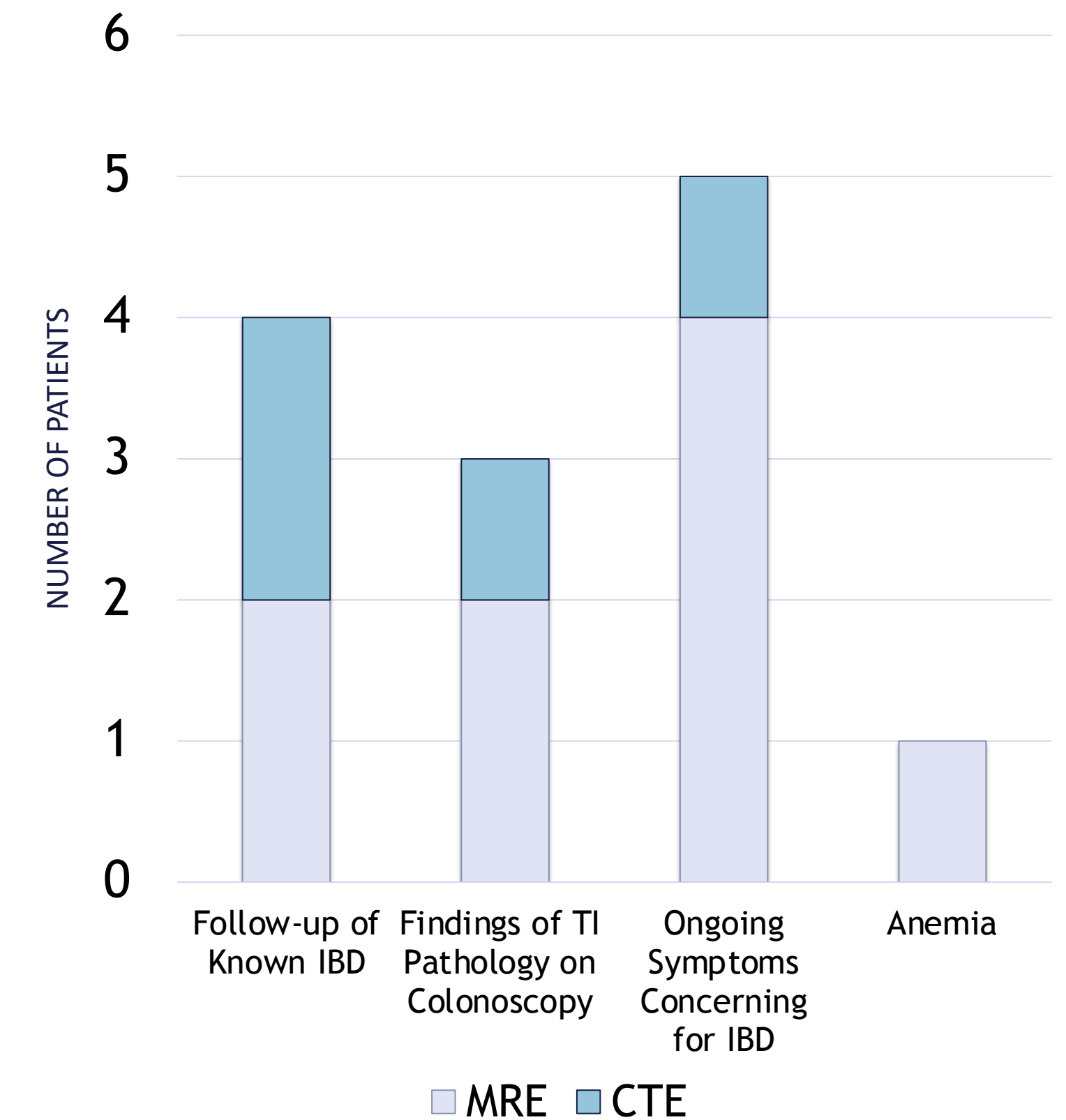


Figure 3. Indications for VCE after negative MRE/CTE

## Conclusions

- Although MRE and CTE are highly sensitive for small bowel IBD, VCE provides an additional method to assess for evidence of IBD in the small bowel.
- In this study conducted in usual clinical practice, 33% of patients with negative MRE and 50% with negative CTE still had active IBD seen on VCE.
- The data presented in this study supports the use of VCE when suspicion for active IBD is high despite negative cross sectional imaging results.