

## INTRODUCTION

- Endoscopic resection of large colon polyps has emerged as the preferred treatment option for large polyps detected during colonoscopy
- There is insufficient data regarding the incidence of advanced adenoma detection during therapeutic colonoscopy for polyp resection
- This study aims to report our experience with additional advanced adenoma detection during large colon polyp resections

## METHODS

- Retrospective chart review
- Patients referred for endoscopic resection of large colon polyps (Sep. 2018 – Apr. 2022)
- Referral procedure reports reviewed
  - Adenomas detected
  - Procedure difficulty
- Data collected
  - Demographics
  - Family history (FH) of colon cancer
  - Incidence of adenoma detected
  - Type advanced adenoma detected and location
- Descriptive statistics and multivariate logistic regression analysis performed

## RESULTS

- 432 patients referred for endoscopic resection of large colon polyp
- 372 patients had a large polyp requiring endoscopic mucosal resection (EMR)
  - Technically successful procedure in 354 patients (95.1%)
  - Morphologic appearance suggestive of invasive cancer in 14 patients (3.4%)
  - Cancer missed on index procedure in 2 patients (0.53%)
  - Large polyps involving a diverticulum 2 (0.53%)
  - At least one missed advanced adenoma in 154 patients (40.8%)
  - Access to documented polyp technically difficult in 14 patients (3.8%)
  - Tattoo placed into polyp in 92 patients (25.9%)
  - Difficult resection in 14 patients (3.8%)
  - Follow up colonoscopy performed in 242 patients (65%)
    - Residual polyp tissue in 16 patients (6.6%) – easily resected
- Multivariate analysis
  - FH of colon cancer significant factor for missed advanced adenoma ( $p < 0.04$ )

Patients	Total number
Male	231(65.3%)
Female	123(34.7%)
Age	62+/-9.1 yrs
Family history of colon cancer	151 (37%)
<b>EMR Location</b>	
Cecum	67(18%)
Ascending Colon	134(36%)
Transverse Colon	63(17%)
Descending Colon	19(5%)
Sigmoid Colon	37(10%)
Rectum	52(14%)
<b>Pathology of Missed Adenomas</b>	
Tubular Adenoma or Tubulovillous Adenoma	107(69.4%)
Sessile Serrated Polyps	67(43.5%)

## DISCUSSION

- Advanced adenomas are frequently missed in patients referred for EMR
- FH of colon cancer is a predictor for missed advanced adenomas
- Education for referring physicians needed
  - Document technical difficulty of colonoscopy
- Avoid tattoo into polyp tissue
- Performing high quality colonoscopy to increase adenoma detection

