

HIGHI ANDHOSPITAI

FIT or Unfit: Advanced Colon Cancer Screening

Sindhu Chadalawada, MD, PGY-2¹; Christina Chou, MD²

¹ Department of Medicine; ² Division of Gastroenterology and Hepatology, Highland Hospital, Oakland, CA





INTRODUCTION

- Colon cancer is the third leading cause of cancer related mortality.
- Screening is recommended for average risk patients beginning at age 45. Modalities include stool-based tests or direct visualization tests.
- We report an unusual presentation of Stage IV colorectal adenocarcinoma in the setting of three annual negative Fecal Immunochemical Tests (FIT).

CASE PRESENTATION

A 67-year-old female presented with a month-long history of generalized weakness, fatigue, and dyspnea.

ROS: Dyspnea on exertion, weight loss, periodic left upper quadrant (LUQ) pain, achy RUQ pain

Physical Exam:

- BP 122/76, HR 67, RR 16, 36.8°C, BMI 23.3, 96% O2 on room air
- Pallor and RUQ tenderness

Labs:

- CBC: WBC 11.2/Hgb 10.1/MCV 88.5/Plts 309
- LFT: AST 116/ ALT 67/ALP 610/ TB 0.5
- Ferritin 413
- Tumor markers: CEA 1470.6/ CA-125 237/AFP 1.8/ CA-19-9 8
- HBsAg, HBcAb, HBsAb, HCAb non-reactive
- FIT negative 2017, 2018, 2020 (within a year of her diagnosis)



Figure 2. Colonoscopy:

Large fungating mass in the ascending colon and ileocecal (IC) valve



Figure 1. CT C/A/P:

Numerous masses in the liver, lungs, kidneys, and L adrenal gland with bilateral pulmonary emboli in proximal right pulmonary artery



Moderately differentiated invasive

Figure 3. Pathology:

colonic adenocarcinoma

DISCUSSION

- FIT is 73.8% sensitive for detecting Stage I-III CRC¹
- Sensitivities dropped to 23.8% and 5.1% with advanced precancerous lesions and sessile serrated polyps¹
- Biennial FIT testing demonstrated lower accuracy of detecting proximal colon cancers by nearly 60%²
- Low efficacy for proximal colon lesions may be attributable to increased hemoglobin degradation, cut off hemoglobin values for FIT, and variances in tumor progression ^{3,4}

CONCLUSION

- Colonoscopy is considered the gold standard
- FIT detects most colorectal carcinomas, however, optimization of detecting right sided colon cancers including exploring a standardized cut off value may be beneficial

References

 Imperiale TF et al. Multitarget stool DNA testing for colorectal-cancer screening. N Engl J Med. 2014;370:1287-97. [PMID: 24645800] doi:10.1056/NEJMoa1311194
Zorzi M et al. Divergent Long-Term Detection Rates of Proximal and Distal Advanced Neoplasia in Fecal Immunochemical Test Screening Programs: A Retrospective Cohort Study. Ann Intern Med. 2018;169(9):602-609. doi:10.7326/M18-0855
Robertson DJ et al. Recommendations on Fecal Immunochemical Testing to Screen for Colorectal Neoplasia: A Consensus Statement by the US Multi-Society Task Force on Colorectal Cancer. Gastroenterology. 2017 Apr;152(5):1217-1237.e3. doi: 10.1053/ j.gastro.2016.08.053. Epub 2016 Oct 19. PMID: 27769517.
Doubeni CA, Levin TR. In Screening for Colorectal Cancer, Is the FIT Right for the Right Side of the Colon? Ann Intern Med. 2018 Nov 6;169(9):650-651. doi: 10.7326/ M18-2444. Epub 2018 Oct 2. PMID: 30285038.