Inadequacy of Barrett's Esophagus Screening Rates in the Community

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Introduction:

- 22,000 New cases of esophageal carcinoma (ECA) diagnosed in 2023 causing 16,000 deaths[1]
  - Late presentation, aggressive course
- Survival improved with early detection and treatment of pre-malignant transformation, Barrett's Esophagus (BE)[2]
- Inconsistent esophagogastroduodenoscopy (EGD) screening in higher-risk patients

Risk Factor	Prevalence
Low-risk, general population[1]	0.8%
Obesity[4]	1.9%
GERD[4]	3%
Age > 50[4]	6.1%
Male sex[4]	6.8%
Family history of Barrett's esophagus or esophageal adenocarcinoma[4]	23.4%

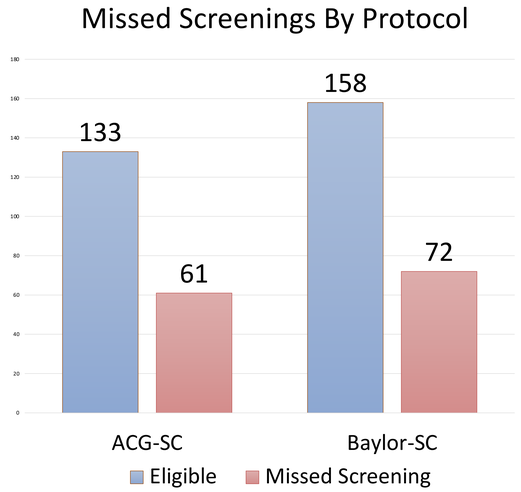
Table 1: Risk Factors and Prevalence of Barrett's Esophagus

Methods:

- Retrospective data collection
- Inclusion criteria:
  - Age ≥ 18, underwent screening colonoscopy with no previous metaplasia diagnosis from April-June 2022 at KHN
- Categorized according to two screening criteria:
  - *American College of Gastroenterologists Screening Criteria (ACG-SC)[4]*
    - Reflux + any three of: male sex, white race, BMI > 25, age > 50, family hx of ECA, smoking hx
  - *Baylor Screening Criteria (B-SC)[5]*
    - Reflux or any five of the previously mentioned factors

Results

- N = 267 patients
  - 133 patients met ACG-SC
    - 61 patients *not* screened (45.9%)
  - 158 patients met B-SC
    - 72 patients *not* screened (45.6%)



Risk Factor predicting Screening Eligibility	X^2	P value
Age	5.17	0.023
Sex	9.95	0.002
ASA	4.20	0.041
Race	5.13	0.021
Presence or absence of reflux	231.07	<0.001
Smoker	17.13	<0.001

Table 2: Predictors of EGD Screening Eligibility

Discussion:

- Significantly more patients undergoing colonoscopy should be identified and screened for esophageal metaplasia
- The B-SC selects more patients due to not requiring patients to have reflux symptoms
- This is beneficial as previous studies have shown that 2.2% of patients without GERD have Barrett's Esophagus.[6]

Conclusion:

- Identification of patients meeting screening criteria for esophageal metaplasia while undergoing screening colonoscopy displays an optimal time for concurrent screening EGD.
- This not only allows increased early identification of esophageal metaplasia, but also is time and cost-effective for patients and providers.
- This study proves that utilizing an established screening criteria, ACG-SC or B-SC, allows for more patients at risk to be properly screened.

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