

Gastric Polyps: Examining Adherence to Polypectomy Guidelines and the Role of Demographic and Clinical Data in Endoscopic Management

INTRODUCTION

- Gastric polyps can be idiopathic or seen in the setting of genetic disorders, medication use, infection, cigarette use, or malignancy.
- Most gastric polyps excised (70-90%) are fundic gland polyps, with about 5-19% containing dysplastic or malignant components. Histology is key to diagnosis and management; thus, the American Society for Gastrointestinal Endoscopy (ASGE) recommends excision and biopsy as follows:
 - o Biopsy of all solitary gastric polyps or resection when possible.
 - o Polypectomy of all fundic gland polyps 1cm or larger, with biopsy or resection of the largest polyp taken in the setting of multiple polyps and representative specimens taken from others.

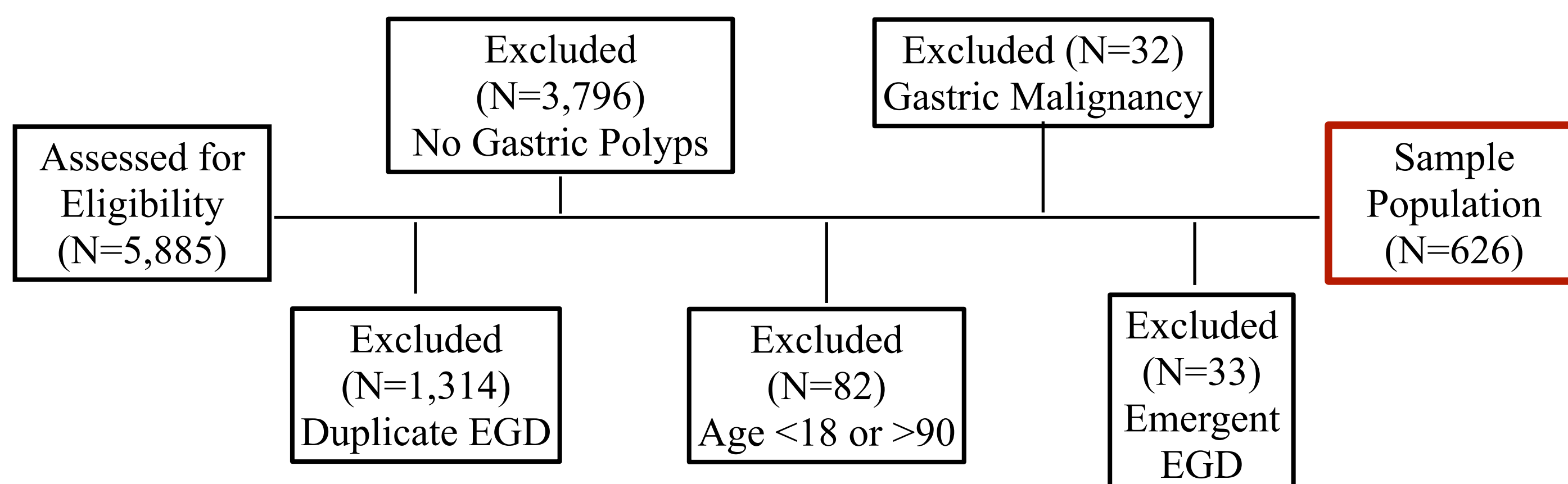
AIMS

- To assess adherence to ASGE guidelines for the resection of gastric polyps during non-emergent EGD in patients 19 to 90 years old.
 - o **Primary Aim: To determine if at least 50% of all solitary gastric polyps visualized during non-emergent inpatient and outpatient EGDs were biopsied.**
 - o Hypothesis: Greater than 50% of all solitary gastric polyps were biopsied.
 - o **Secondary Aim: To determine if all fundic gland polyps greater than or equal to 1cm were biopsied.**
 - o Hypothesis: Greater than 50% of all fundic gland polyps greater than or equal to 1cm were biopsied.
- o Tertiary Aim: To identify demographic, clinical, and pharmacologic data influencing endoscopic management.

METHODS

- In this retrospective descriptive study, *Cerner* electronic medical records and *gGastro GI Software* were queried for patients 18 to 90 years old who underwent non-emergent EGD between October 17th, 2018, and October 17th, 2021 at Westchester Medical Center.
- Data was extracted from EMRs of all patients meeting inclusion criteria and analyzed via SPSS for descriptive statistics. 626 subjects were included in the study.

Figure 1: Consort Diagram of Exclusion Criteria



RESULTS

Figure 2: Biopsy of Solitary Gastric Polyps

| Was Biopsy Performed? | Count | | Count N (%) | |
|-----------------------|-------|-----|-------------|-------|
| | Yes | No | Count | N (%) |
| Yes | 496 | | 79.2% | |
| No | | 130 | | 20.7% |

Figure 3: Biopsy of Fundic Gland Polyps Greater than or Equal to 1cm

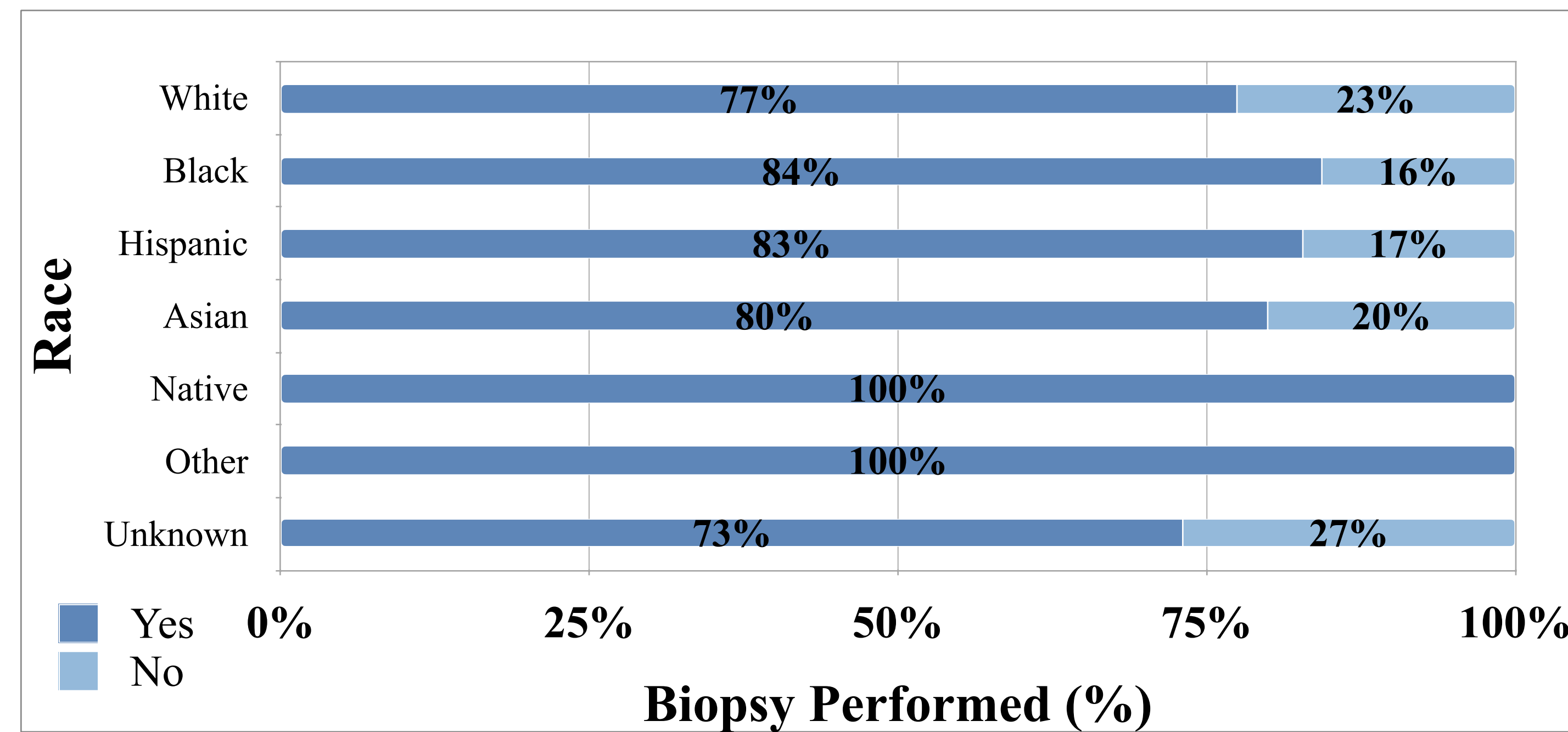


Figure 4: Clinical and Pharmaceutical Influencing Endoscopic Management

| | | Was Biopsy Performed? | | | |
|--------------------------------------|-----|-----------------------|--------------|-------|--------------|
| | | Yes | | No | |
| | | Count | Column N (%) | Count | Column N (%) |
| History of H. Pylori | Yes | 36 | 97.4% | 1 | 0.3% |
| | No | 450 | 78.3% | 125 | 21.7% |
| History of gastrointestinal polyps | Yes | 124 | 80% | 31 | 20% |
| | No | 361 | 79% | 96 | 21% |
| History of smoking | Yes | 125 | 76.7% | 38 | 23.3% |
| | No | 347 | 80.3% | 85 | 19.7% |
| History of alcohol use | Yes | 133 | 73% | 27% | 37.4% |
| | No | 337 | 86.4% | 18 | 4.6% |
| Current proton pump inhibitor use | Yes | 262 | 76.2% | 81 | 23.6% |
| | No | 224 | 83.3% | 45 | 16.7% |
| Family history of gastric malignancy | Yes | 26 | 96.3% | 1 | 0.04% |
| | No | 387 | 80.5% | 94 | 19.5% |
| Family history of polyp disease | Yes | 20 | 90.9% | 2 | 0.09% |
| | No | 407 | 80.4% | 99 | 19.5% |

Figure 5: Demographic Data Influencing Endoscopic Management

| Sex | | Was Biopsy Performed? | | | |
|-----|-------|-----------------------|-------------|-------|-------------|
| | | Yes | | No | |
| | | Count | Count N (%) | Count | Count N (%) |
| Men | | 161 | 72.2% | 62 | 27.8% |
| | Woman | 334 | 81.7% | 69 | 16.9% |

CONCLUSIONS

- o Aim 1: Biopsy of Solitary Gastric Polyps
 - o **79.2% of all solitary gastric polyps visualized during non-emergent EGD in patients 18 to 90 years old were biopsied in accordance with ASGE recommendations.**
- o Aim 2: Biopsy of Fundic Gland Polyps Greater Than or Equal to 1cm
 - o **81 of 110 (73.6%) fundic polyps greater than or equal to 1cm visualized during non-emergent EGD in patients 18 to 90 years old were biopsied in accordance with ASGE recommendations.**
- o Aim 3: Identify Demographic, Clinical and Pharmacological Data Influencing Endoscopic Management
 - o **Greater than 50% of all solitary gastric polyps were biopsied regardless of sex, clinical and pharmacologic data and greater than 50% of all fundic gland polyps greater than or equal to 1cm were biopsied regardless of race.**
 - o **Patients who underwent EGD for gastrointestinal bleeding or esophageal varices screening were less likely to undergo biopsy or have polypectomy preformed.**

REFERENCES

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