



ETHNIC ISSUES IN ENDOSCOPY

The United States is a multi-ethnic society. The practice of medicine, similar to many other social practices, tends to gear towards the majority ethnic groups. However, disease patterns affect each ethnic group differently. Observations of the differences in the prevalence of disease among ethnic groups can be an important key to diagnosis and management. This guideline is prepared to emphasize some of the more important differences in gastrointestinal disease patterns among minority ethnic groups that may influence the practice of endoscopy in these patient groups. This guideline is not intended to serve as a comprehensive list of gastrointestinal disease profile for various ethnic groups. Studies addressing the impact of modifying gastrointestinal disease management strategies in minority ethnic groups are currently lacking. Standard of practice recommendations cannot be easily generated based on currently available data. However, it is logical to assume that paying more attention to diseases that have higher prevalence among specific ethnic groups will have significant impact on the health of these groups. At the same time, it is important to recognize that racial populations are not homogenous.¹

ESOPHAGUS

While gastroesophageal reflux disease is common in Caucasians, its prevalence appears to be lower among African-Americans.² Also, although the incidence of esophageal and gastric cardia adenocarcinoma have been rising at an alarming rate in Caucasian males, reaching an annual incidence of 5/100,000 by the mid 1980's, these conditions are far less common among African-Americans, Hispanics and Asians.³⁻⁵ In contrast, squamous cell carcinoma of the esophagus remains the most prevalent esophageal tumor in African-Americans, with an annual incidence of 15/100,000, and among new immigrants from regions of the world such as Northern China, India and Northern Iran where the annual incidence reaches over 100/100,000.⁶ Divergent incident rates of esophageal adeno and squamous carcinoma among different race and gender groups raise the question of whether screening recommendations should be modified accordingly. We acknowledge that considerable research needs to be performed before specific guidelines can be developed.

STOMACH

The incidence of *Helicobacter pylori* (*Hp*) gastritis varies among different ethnic groups in the United

States. Adjusted for age, income and education, African-Americans and Hispanics have a prevalence of 70% to 80%, while the prevalence is only 34% in Caucasians.⁷ Because chronic *Hp* infection is an important risk factor for gastric carcinoma, the differences in the prevalence of *H. Pylori* among these groups may contribute to the two to three folds higher incidence of gastric carcinoma in African-Americans, Hispanics, and Native-Americans when compared to Caucasians.^{8,9} These groups at risk for gastric carcinoma predominately have the "intestinal" type of gastric cancer, where intestinal metaplasia in the stomach is considered a precursor lesion. Endoscopic surveillance for intestinal metaplasia may select the patient groups at risk for gastric cancer.¹⁰ In one study from southwestern United States, the prevalence of intestinal metaplasia was significantly higher in Hispanics and African-Americans (50%) when compared to Caucasians (13%).¹¹ The detection rate for intestinal metaplasia was significantly higher when four instead of two biopsies were obtained. Biopsies should be obtained from the antrum and gastric body in these patient groups. Detection and eradication of *H. pylori* infection in these groups may therefore have substantial impact on their subsequent risk for gastric cancer. Cost-effectiveness models suggested that screening and treating *H. pylori* has the potential of significantly reducing the risk for gastric cancer at a reasonable cost. This benefit is even more evident for high cancer risk groups. However, clinical studies are needed to confirm these conclusions.^{12,13} In Japan, where the prevalence of gastric cancer is among the highest in the world, a vigorous screening protocol produces significant beneficial impact on the disease.¹⁴ Further studies are needed to see if more vigilant screening for gastric cancer in these higher risk ethnic groups in the United States will produce similar beneficial effect as in Japan. Endoscopic screening for gastric cancer in new U.S. immigrants from high-risk regions around the world such as Japan, China, Russia, and South America should also be considered.

COLON

As the second leading cause of cancer mortality, colorectal cancer is a major health issue in the U.S. The incidence of colon cancer in the U.S. is among the highest in the world. Screening for colorectal cancer has been proven to reduce mortality.¹⁵ Differences in colon cancer mortality exist between ethnic groups.

African-Americans with colon cancer have a 50% increase in mortality risk when compared to Caucasians.¹⁶ Advanced cancer stage at presentation accounts for half of this increased mortality risk. Although there were unexplained factors that contributed to the increased mortality risk, poor economic status and inadequate access to health care continue to be important factors. Limited use of cancer screening is especially prevalent among elderly African-American men.^{17,18} As screening programs with polypectomy have been effective in reducing colon cancer mortality, special efforts are needed to provide colon cancer screening to this group of patients. In addition, African-Americans have been reported to have more right-sided adenomatous polyps.¹⁹ Colon cancer screening strategies for African-Americans may need to be modified. Colon cancer screening should also be emphasized to other minority ethnic groups such as Hispanics and Native Americans that have higher incidences of colon cancer than the general population.^{20,21}

In summary, various gastrointestinal diseases demonstrate racial and ethnic differences in their epidemiology. Practitioners should be aware of these differences as diagnostic and management strategies may need to be altered in order to help reduce racial and ethnic disparity in healthcare outcomes.

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