CONCLUSION:

We performed a single-center retrospective study at the Dayton Veterans Affairs Medical Center. The baseline demographic characteristics of age, sex, and race were collected (Table 1). The number of adenomas, size of the largest adenoma, and histology were recorded both at index and surveillance colonoscopy. We created two time periods for surveillance colonoscopy – within five years and more than five years.

RESULTS:

From 2008 and 2011, 1960 patients had adenomatous polyps during CRC screening colonoscopies, with 406 patients having HRAs. The mean age for the 406 study patients was 65.7 ± 7.0 years, 99% were male, while 88.4% were Caucasian and 11.6% African American. Patients with ≥3 sub-centimeter adenomas at index colonoscopy (IC) had a higher rate of ≥3 sub-cm adenoma(s) (52.3% vs. 39.4%, P = 0.043) and >10 mm adenoma(s) (22.7% vs. 13.0%, P = 0.038) if their surveillance colonoscopy (SC) was >5 years compared to SC ≤5 years. (Table 2). No other differences were found when comparing SC >5 years to SC ≤5 years.

CONCLUSION:

As a single comprehensive health care system, Veterans Affairs is committed to CRC screening and surveillance. To our knowledge, this investigation is the first study of HRA subtypes in the US veteran population. Our study found that patients with ≥3 sub-centimeter adenomas at IC had a higher rate of ≥3 sub-cm adenomas and >10 mm adenoma(s) if their SC was >5 years compared to SC ≤5 years. This indicates that surveillance colonoscopy can be considered at 5 years. This result supports the US Multi-Society Task Force (USMSTF) 2020 guidelines that favor a 3 to 5-year interval for 3–4 sub-cm adenomas. The relatively small number of patients with HGD and CRC identified on SC limited our study’s ability to compare incidence of HGD and CRC at SC ≤5 years and >5 years. This suggests that a larger initial sample size may be necessary to reveal potential differences in HGD and/or CRC between different time periods for surveillance. This also highlights the need for future research to clarify risk stratification and the management of post-polypectomy patients. Similar studies are needed in the future to support best practices.

Table 2. High-risk adenomas for surveillance colonoscopy at ≤5 years vs. >5 years.

<table>
<thead>
<tr>
<th>Adenoma Type</th>
<th>≤5 Years</th>
<th>&gt;5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥3 sub-cm adenomas (n=186)</td>
<td>36%</td>
<td>24%</td>
</tr>
<tr>
<td>≥10 mm adenoma(s) (n=149)</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>HGD or CRC (n=123)</td>
<td>7%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Chi square test**

Table 1. Polyp type, localization, and presence of advanced adenoma and/or ≥3 polyps in different races/ethnicities. TA = tubular adenoma, TVA = tubulovillous adenoma, SSL = sessile serrated lesion, HP = hyperplastic polyp, AC = adenocarcinoma.

**Figure 1.** Racial distribution in polyectomy cohort.

Racial and Ethnic Disparities in the Diagnosis of Colorectal Polyps

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INTRODUCTION: Colorectal carcinoma (CRC) is the third most common cause of cancer-related death in the United States. University of Illinois Hospital serves a population predominately comprised of ethnic minorities. The aim of this study was to analyze if there are racial/ethnic disparities in the diagnosis of colon polyps to improve early detection and CRC prevention.

METHODS: After institutional review board approval, we performed a retrospective review of patients that underwent polypectomy on surveillance, screening, or diagnostic colonoscopies in our institution between March 2019 and January 2020. Information about race/ethnicity, age, sex, polyp type, localization, presence of advanced features or ≥3 pre-cancerous polyps were analyzed.

RESULTS: 401 patients were included in the study, and a total of 1166 polyps were included. Two hundred eleven patients (52.6%) were male and 190 (47.4%) were female. 53.4% were black/Non-Hispanic (B/NH-L) (n = 214), 17.5% were white (W/NH-L) (n = 70), 25.2% were Other/Hispanic-Latino (O/NH-L) (n = 101), and 4% were Asian (A/NH-L; n = 16). No significant gender effect was noted on the likelihood of different types of polyps (Fisher’s exact test P-value = 0.7204). Race/ethnicity had borderline significant effect on the likelihood of having advanced adenoma or ≥3 TAs (chi-squared test P-value = 0.079). There were 5 (7.1%) W/NH-L, 12 (5.6%) B/NH-L, 3 (3%) O/NH-L, and 1 (6.2%) A/NH-L who had high grade dysplasia (HGD). However, there was no significant correlation between race/ethnicity and HGD (Fisher’s exact test P-value = 0.5364). A statistical difference was noted when comparing race/ethnicity and probabilities of having different types of polyps (chi-squared test P-value = 0.01269). Comparing sessile serrated lesion (SSL) incidence on B/NH-L vs other races/ethnicities, B/NH-L had higher likelihood of developing SSL (Fisher’s exact test P-value = 0.04438).

CONCLUSION: Our study demonstrated that race/ethnicity has an effect on the likelihood of having different polyp types, including SSLs, which were more prevalent in the B/NH-L population. This information can be used to guide future studies to better serve underrepresented minorities in Colorectal Cancer screening programs.

Impact of Antithrombotic Therapy (ATT) on Screening of Colorectal Cancer in Ecuador

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INTRODUCTION: The majority of colorectal cancer (CRC) patients present with bleeding-related symptoms. The frequency of the administration of antithrombotic drugs has been increasing. Antithrombotic therapy (ATT) may induce bleeding from colorectal cancer (CRC) and may facilitate early detection of CRC. We aimed to determine the impact of ATT on diagnosis of CRC.

METHODS: We retrospectively studied the patients who pathologically diagnosed CRC in our country between July 2015 to February 2020. Bleeding related symptoms and TNM-stage were compared between patients with CRC receiving antithromplaty therapy, anticoagulant therapy, multi-ATT (e.g., dual antithromplaty drug or antiplatelet drugs plus anticoagulant drugs), and non-ATT. Bleeding related symptoms were defined as overt bleeding (hematochezia, melaena, and rectal bleeding), positive fecal blood test and anemia.

RESULTS: A total of 1114 patients with CRC were analyzed. Of these, 218 patients were included in antithromplaty therapy group, 109 patients in anticoagulant therapy group, 101 patients in multi-ATT and 806 patients in non-ATT group. With regard to reasons for work up of CRC, the rate of bleeding related symptoms defined as overt bleeding (hematochezia, melena, and rectal bleeding), positive fecal blood test and anemia in antiplatelet therapy group (54%, OR 1.5, 95% CI 1.3–1.7, P < 0.001) and multi-ATT group (66%, P < 0.001) were significantly higher than those in non-inATT group (47%) (Antithromplaty therapy (58%, OR, 1.65, 95% CI 1.126–2.97, P < 0.01) and Multi-ATT (77%, OR 1.866, 95% CI 1.089–2.309, P = 0.012) were significantly associated with early stage diagnosis of CRC compared with non-ATT (46%), but antithromplaty therapy (50%, OR, 1.71, 95% CI 0.904–1.522, P = 0.34) was not.

CONCLUSION: Anticoagulant therapy and multi-ATT may facilitate detection of CRC in its early stage through bleeding related symptoms.

S0293

CO2 Insufflation vs Air Insufflation for Elective Colonoscopy at Two Reference Centers in Ecuador

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INTRODUCTION: Insufflation of the intestinal tract, usually with room air, is necessary to improve visualization during colonoscopy. Pain and abdominal discomfort are usual complaints associated mainly with the use of air insufflation. However, most patients complain of bowel distension and abdominal pain afterwards. Recently, carbon dioxide (CO2) rather than air insufflation has been used. The aim was to evaluate the efficacy, safety, and comfort of colonoscopy CO2 over air for insufflation.

METHODS: Prospective analytical cohort study from July 2018 to February 2020, 876 colonoscopy examinations were randomized into two groups according to the gas insufflation used: Air Group (n = 460) and CO2 Group (n = 416).

RESULTS: The Air and CO2 Groups were similar in respect to bowel preparation evaluated using the Boston scale, no statistically significant differences related to reasons for examination, presence or intensity of pain at the time of the procedure, age, gender, previous surgery, maneuvers necessary for the advancement of the device, and presence of polyps, tumors or signs of diverticulitis, sedation dosage, complications. The relative risk (RR) of immediate pain is 4.6 times higher when insufflation is done with air instead of CO2 (RR = 4.6, 95% CI 3.2–8.1, P < 0.001). The risk of abdominal distension in the air group was 2.4 times higher than that of the group insufflated with CO2 (RR = 2.4, 95% CI 1.6–3.9, P < 0.001).

CONCLUSION: The use of CO2 is better than air as it avoids post-examination bloating, improves tolerance to colonoscopy, reducing pain and flatulence out to 6 hours following the procedure, without any additional adverse reactions, warranting routine clinical use.

S0294

Smaller Sized Sessile Serrated Lesions in Asians Suggest the Need for a More Careful Examination of the Proximal Colon in This Population

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INTRODUCTION: Sessile serrated lesions (SSLs) are premalignant colonic lesions suspected to be a major cause of de-novo, colorectal cancers (CRCs) developing between screening colonoscopies. Researchers have studied the outcome of sessile serrated lesions and clinical variables in the entire cohort (N = 2,945) – the first large study evaluating the effect of sildenaﬁl on colorectal neoplasia. However, preva-

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