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Response to reviewers' comments:

We thank the reviewers for their comments that are addressed below and in this revised version of the manuscript. Also, below are two versions of the revised manuscript without (first) and with (last) Track-changes.

1) The study cohort comprises of patients who have self-identified as Hispanic and who have undergone colonoscopy at a single center. The study does not include a comparable group including people of non-Hispanic ethnicity to compare prevalence/ characteristics/ etc. Furthermore, it is not clear what size of Hispanic population in the Washington DC area this represents and as such how representative of the general, Hispanic population this study can be.

In this study, we examined a large number of colonoscopies performed among Hispanics over a long period of time (10 years). Our study represents a single institution's experience limiting the generalizability of our findings. The reviewer is right to point that Hispanics are a heterogeneous group, however a large proportion of Hispanics seen at our institution are from El-Salvador. The percentage of Hispanics in the District of Columbia metro area has been increasing from 2.1% in 1970 to 10.1% in 2013 (District of Columbia 2013 Census estimate", United States Census Bureau). As such this group deserves more attention as far as public health and diseases trends are concerned. As for specific comparison for cancer in general and colorectal cancer in particular, we have updated our references IReferences 1 to 6) to highlight that Hispanics are still the group with the lowest burden of colorectal cancer among all American ethnic and racial groups.

The present study sought to first establish general colorectal cancer epidemiological data on these latest immigrants to the United States. Our findings, in comparison to their non-immigrant counterparts, clearly show an increase in neoplastic potential.

Moreover, a comparison within our institution also reveals that when compared to African Americans, that are the primary users of our Hospital, the neoplastic rate in this population, while increasing in comparison to their counterparts in their countries of origin, are still below the rates seen in African Americans (Nouraie M, Hosseinkhah F, Brim H, Zamanifekri B, Smoot DT, Ashktorab H. Clinicopathological features of colon polyps from African-Americans. Dig Dis Sci. 2010;55(5):1442-9).

2) It is unclear how symptoms leading to colonoscopy were ascertained. Furthermore, did some patients present with more than one symptom and were these patients more likely to have a positive colonoscopy than those with one symptom?

The indications for colonoscopy were abstracted from the colonoscopy reports. Few patients in this study had more than one indication which may be related. For example, few patients with anemia had also GI bleeding. This is also the case for few patients with constipation associated with abdominal pain. The fact that only few patients presented with more than one symptom did not allow meaningful comparison of mono-symptomatic vs. multi-symptomatic patients. This is also another reason why the overall analysis focused on colonoscopy outcomes in the presence (diagnostic) or absence (screening) of symptoms. Abdominal pain was found to be the primary symptom associated with polyps' detection**.**

3) The results section is confusing with regards to polyp numbers. For example, in paragraph four, n for adenoma =273, but in table 1 n=385. Is this due to multiple adenomas in the one patient? If so, it should be made clearer that this is the case.

It is indeed due to multiple polyps' presence. We have revised the paper and tables for better and clearer data presentation.

4) Why were "polyps" which were later found to be "normal benign mucosa (n=77, 16%)" included in subsequent analysis? I would have thought that these should have been excluded from further analysis.

We agree with the reviewer and removed normal benign mucosa cases from the analysis.

5) Given the significant differences in colonoscopy and polyp detection rates over time in this cohort, I think the results may be more valid if a further analysis was performed and restricted to patients who underwent colonoscopy after 2005. Given the low rates of colonoscopy in the early part of the cohort, (such as experience of the endoscopist, bowel preparation, etc.), many confounding factors could influence the low polyp detection rate.

We did perform an analysis of the cases from 2005 to 2010 and added a new section in the results entitled: "Subgroup analysis of more recent patients".

6) How many cancers would be expected to be identified in the non-Hispanic population? And were there any cancers identified in the Hispanic population by other means over the same time period?

In African Americans at our institution, we detect .20 to 25 colon cancer on a yearly basis which when compared to the rate detected for Hispanics in this study, 7 in 10 years, reflect a still lower cancer rate, after adjusting for all variables.

7) Formatting throughout the manuscript should be consistent. For example, reference formatting is not consistent.

The manuscript has been formatted according to WJG criteria**.**

Reviewer#2:

This paper summarizes the results of colonoscopies performed in self-identified Hispanics in an urban hospital. The paper would be more informative if the experience of Hispanics at this hospital were compared to that of blacks (and/or non-Hispanic whites if there are enough of them). By itself, it is difficult to interpret and compare with results of other studies, because of the grab-bag nature of the sample (i.e., all types of indications for colonoscopy in a hospital setting).

See response to Reviewer#1 first comment above.

Specific Comments:

1. More detail needs to be provided about how Hispanic ethnicity was ascertained. Also, other characteristics (country of origin, U.S. versus foreign born) would also be useful. If these are not available, then census data from D.C. should be cited to give some idea of the type of Hispanic population being studied.

The patients in this study se;f-identified as Hispanics. Most of our Hispanic patients are foreign born, predominantly from El-Salvador and as such constitute a highly homogenous group for the purpose of our study.

2. More detail needs to be provided about how the symptom/indication categories were ascertained.

See response to reviewer#1 above.

3. In Figure 2, there is no indication of surveillance colonoscopy; why is that? In Figure 2, it is not clear if these are mutually exclusive categories or not.

Surveillance colonoscopy refers to history of polyps. Because our study population is made of low socioeconomic immigrant Hispanics and because our study period covers the 2000 to 2010 period, we did not note any surveillance colonoscopies. Indeed, the 50 years colonoscopy screening recommendation was implemented in the year 2000 and many communities are lagging behind in undergoing colonoscopies. A good example for this is the difference we noticed in the volume of performed colonoscopies in our study between 2000-2005 and 2005-2010. In our ongoing studies in Hispanics and others, we are noticing an increase of surveillance colonoscopies.

4. The tables are not labelled clearly. In Table 1, for example, there are 273 with adenomatous polyps and 216 with “No adenomatous polyps”. The latter seems to be the group with polyps but

not adenomatous polyps. Therefore, it should be labeled something like “non-adenomatous polyps, only”. Similar issues for other tables.

The tables have been revised for clarity and to remove any confusion.

5. The presentation would be easier to follow if there were one table with mutually exclusive, hierarchical categories (advanced adenoma, non-advanced adenoma, other polyp, no polyp) and demographic and lesion location data given for each category. P-values for the various comparisons (or global across categories) could be given.

We removed table 1 and revised all other tables to address the reviewer’s comment**.**

6. Is it known whether there are repeat colonoscopies in the analysis set (i.e., the same subject with multiple colonoscopies). Should say whether this is the case or not.

There were no repeat or surveillance colonoscopies in this study. All cases were unique.

7. How can a polyp be located “on both sides of the colon”? Is it meant that subjects had polyps found on both sides on the colonoscopy?

Indeed, certain patients with multiple polyps had them distributed all over the colon and not restricted to one side or the other. These were patients with pancolonic neoplastic predisposition.

8. In table 3, it is curious that 38% of advanced adenoma had location “both”, indicating that they had at least 2 advanced adenomas. Since some subjects with 2 would have both distal or both proximal, the actual percent with 2+ would likely be even higher.

In response to the reviewer’s comment, we revised our statistical analysis, the number of advanced adenomas with both locations is presently 45%. We thank the reviewer for his meticulous observation.

9. The implications of the hospital setting are not clear. Were these inpatients, outpatients or both (and if both, what proportion of each)?

All subjects in the present study were outpatients. A statement was added in Matertials & Methods to emphasize that.

10. First sentence of Methods is unclear. “We retrospectively reviewed the medical records of 21,201 patients who had undergone from Jan. 2000 to Dec. 2010 at Howard University Hospital, Washington, DC”. Undergone what?

The statement above was corrected to read: “who had undergone colonoscopy”.

11. In Discussion, it is stated that 7 cancers were found; results say 6. It is stated that this points to a low incidence of CRC in this population. How is this justified? What would be the expected number in a non-Hispanic population?

There are indeed 7 CRC cases in the study population over 10 years. The numbers' discrepancy has been corrected. This points indeed to a low CRC prevalence when compared to African Americans seen at our institution for the same time period who display an average of 20 to 25 colon cancers on a yearly basis.