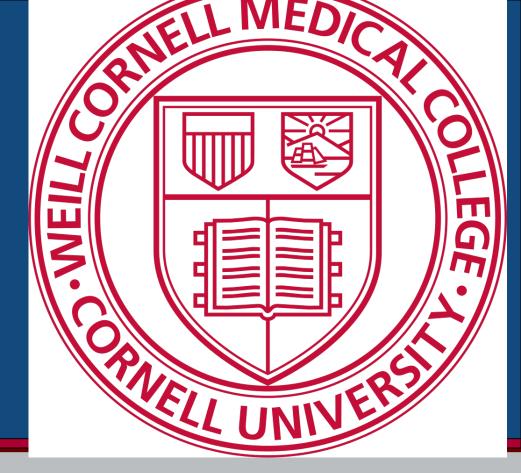


Comparison of Demographics and Phenotypic Behavior of Inflammatory Bowel Disease among Southeast Asians and Caucasians at a Tertiary Center in Houston



2.Texas A&M School of Medicine

3.Division of Gastroenterology and Hepatology, Lynda K and David M Underwood Center for Digestive Disorders, Houston Methodist Hospitall



BACKGROUND

AM

TEXAS A&M

- Incidence and prevalence of IBD has increased in South Asia in the recent decades. The population of individuals of South Asian origin or descent in Western countries, including the United States (U.S.), is also increasing.
- However, the burden of IBD among South Asians in the United States is poorly characterized and requires further study. The prevalence and clinical features of IBD vary among different ethnic and racial groups.

AIMS

Compare demographics, clinical features and phenotype of IBD, as well as the need for surgeries and hospitalizations related to IBD in South Asians living in the U.S. to Caucasians living in U.S.

METHODS

- 70 South Asian patients were consecutively selected from the IBD clinic at Houston Methodist between 2018-2021 and compared to 70 Caucasian patients seen in 2021
- Chi-square and Fischer's exact test were used for comparison.

RESULTS **South Asians** Caucasians Prevalence 71.4% 29 % 54.2 % (n=50)(n=20)(n=32)(n=38)CD: Similar incidence between age Age at CD: Majority (64%) at 17-40* groups <16, 16-40 and >40 years diagnosis UC: Median age 27 years UC: Median age 28.5 years CD: Majority (70%) were female CD: Majority (66%) were men* Gender UC: 85% were female UC: Half of the patients were female differences CD: 24% non-stricturing, non-CD: 76% had non-stricturing, nonpenetrating, 42% stricturing CD, 26% penetrating*, 7.8% stricturing, 15% penetrating behavior penetrating type of disease Disease 62% had ileocolonic disease, 24% had 65% had ileocolonic diease, 26% had phenotype perianal disease perianal disease UC: 70% had pancolitis, 25% had left-UC: 64% had pancolitis, 20% had sided disease proctitis CD: Only 1/3rd of the South CD: Half (52%) of the patients had a History of Asians needed surgery* IBD-related hx of IBD-related surgery UC: 6% had a hx of colectomy UC: 25% had a hx of colectomy bowel surgery CD: 21% had CD-related CD: 62% had CD-related hospitalizations* hospitalizations IBD-related UC: 29% had UC related UC: 30% had UC related hospitalizations hospitalizations hospitalizations in the past in the past

South Asians Caucasians P-value

8 (16%)

4(12%)

46 (92%)

35(70%)

|11 (22%)

23 (46%)

6(15.3%)

33 (84%)

31 (93%)

2 (2.5%)

Table 1: Clinical features of patients with Crohn's disease

12 (28.94%)

3 (7%)

0.89

0.27

Family history of IBD

History of biologic rx

Response to biologics

History of smoking

Presence of EIMs

South Asians Caucasians Pvalue 5(20%) Family history of IBD 4(12.9%) History of smoking 4 (25%) 1(3%) 14 (70%) History of biologic rx 18 (58%) Response to biologics 10 (71%) 14 (78%) 4 (22.22%) 4 (28.5%) Presence of EIMs 10 (32.2%) 4 (25%)

Table 2: Clinical features of patients with Ulcerative Colitis

DISCUSSION

- Knowledge of ethnic differences in IBD behavior, location and treatment responses can impact clinical care and treatment.
- Other studies have shown UC being more prevalent in South Asians with IBD (58% UC in South Asians).
- Our study showed a male preponderance in the South Asian patients with CD and a female preponderance for the White UC patients. The same trend was observed in Walker et al's study in North London.
- Non-stricturing non-penetrating disease being more common in South Asians and stricturing disease in the Caucasian population may explain the difference in rate of surgery and hospitalizations, which is similar to other studies done on South Asian IBD behavior in the US.

CONCLUSIONS

UC is the more prevalent IBD diagnosis in South Asians. The phenotype of CD in South Asians is significantly different in terms of behavior of disease, similar in UC and need for surgeries and hospitalizations is lower in South Asians living with CD in comparison to Caucasians.

REFERENCES

- Bodiwala, V., Marshall, T., Das, K. M., Brant, S. R., & Seril, D. N. (2020). Comparison of Disease Phenotypes and Clinical Characteristics Among South Asian and White Patients with Inflammatory Bowel Disease at a Tertiary Referral Center. Inflammatory bowel diseases, 26(12), 1869–1877. https://doi.org/10.1093/ibd/izaa019
- 2. Walker, David G. et al. "Differences in Inflammatory Bowel Disease Phenotype between South Asians and Northern Europeans Living in North West London, UK." The American Journal of Gastroenterology 106 (2011): 1281-1289.