Demographics in Women with Barrett's Esophagus

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Purpose: The aim of this study is to evaluate the demographics and characteristics of women with Barrett's esophagus (BE) and compare this data to men and to identify possible risk factors that may be associated with a higher rate of dysplasia and esophageal adenocarcinoma (EAC) progression rate in BE patients.

Methods: The study population was collected from the database at Ochsner Clinic that had BE between the period of 1990-2012. These records were reviewed to obtain age, gender, race, length of BE, hiatal hernia presence and size, BMI, smoking, GERD, esophagitis, alcohol use, anxiety and/or depression history. Subjects with high grade dysplasia (HGD) or EAC confirmed by two expert pathologists found at index endoscopy or during the first year of diagnosis of BE were considered prevalence cases. Incidence cases were considered if the subjects were found with HGD/EAC after 1 year of index endoscopy during surveillance.

Results: From 495 BE patients, 329 (66%) men and 166 (34%) women, and 90% was Caucasian. HGD incidence for women was 0.6% vs 2.7% men. Prevalence was 0.6% women vs 12% men. EAC incidence was men 2.4% vs women 0.6%, and 13% men vs 3% women for prevalence (p=0.001). Thirty-five percent of patients possessed long segment BE (LSBE) and 65% had short segment BE (SSBE). Twenty-two percent of patients had LSBE vs. 42% of men; P = <0.001. LSBE vs. SSBE had higher percentages of HGD 6% vs 1% and EAC 18% vs. 5%, respectively for prevalence, and HGD 5% vs. 1% and EAC 5% vs 0.3%, for incidence, P = <0.001. Overall, men had larger hiatal hernias vs. women, P = 0.004. For BMI, incidence cases of HGD had a higher mean BMI (34 ±13) than prevalence cases BMI (27 ±16), p = 0.033. EAC in smokers, prevalence was higher than incidence, 33 patients vs 6 patients, P = 0.002, and prevalence for smokers was higher than non smokers, 14% vs 5%. There was no statistically significant difference seen at incidence vs. prevalence of HGD/EAD in reference to hiatal hernia size, esophagitis, GERD, alcohol, and anxiety and/or depression. Esophagitis and anxiety and/or depression were found in a greater percentage of women. Average BMI showed no significant difference between men and women.

Conclusion: Men outnumbered women with BE by a ratio of 3:1, and men were twice as likely to have LSBE. LSBE was associated with a greater incidence and prevalence of HGD/EAC. Higher mean BMI was associated with a greater number of incidence cases of HGD compared to prevalence cases. There was a substantially higher incidence and prevalence of HGD/EAC in men compared to women. This study elucidates the diversity of risk factors/associations that are present in the BE population, and the dynamic interplay involved that influences neoplastic progression.