Washington University in St. Louis Washington University Open Scholarship

Volume 12

Washington University Undergraduate Research Digest

Spring 2017

The Impact of E-cigarette Use in Inflammatory Bowel Disease

Jasmine Serpen Washington University in St. Louis

Follow this and additional works at: https://openscholarship.wustl.edu/wuurd_vol12

Recommended Citation

Serpen, Jasmine, "The Impact of E-cigarette Use in Inflammatory Bowel Disease" (2017). *Volume 12*. 173. https://openscholarship.wustl.edu/wuurd_vol12/173

This Abstracts S-Z is brought to you for free and open access by the Washington University Undergraduate Research Digest at Washington University Open Scholarship. It has been accepted for inclusion in Volume 12 by an authorized administrator of Washington University Open Scholarship. For more information, please contact digital@wumail.wustl.edu. TOWARD A BETTER UNDERSTANDING OF ...

The Impact of E-cigarette Use in Inflammatory Bowel Disease

Jasmine Serpen

Mentor: Alexandra Gutierrez

E-cigarettes represent a novel method of nicotine inhalation that is growing in popularity and has been studied as a tool for smoking cessation in the general population; however their effect on disease activity, smoking cessation efficacy, disease course, and response to therapy in Inflammatory Bowel Disease (IBD) is unclear. This study attempts to better define and characterize e-cigarette (e-cig) use in the clinical context of patients with IBD. E-cig users were identified from a retrospective database of smoking behaviors in an IBD population. Medical records were reviewed for clinical assessments of disease activity, medication changes, endoscopies, MREs, and surgeries during the year prior to beginning e-cig use, the period when e-cigs were used, and the year after e-cigs were stopped if applicable.

Baseline characteristics of the 27 study participants revealed no significant differences in age, gender, or disease subtype between current and former e-cig users. Use of e-cigs was found to reduce cravings for regular cigarettes in 21 of 27 people but sustained smoking cessation was only seen in 17 of the 27. The primary motivation for choosing e-cigs over other methods of smoking cessation was that other methods were unsuccessful for the patient, in addition to the appeal of the hand to mouth habit and resemblance to regular cigarettes afforded by the e-cigs. Disease activity via subjective and objective measures were recorded but not evaluated for significance due to a small sample size.

We conclude that e-cig users experienced a lessened craving for regular cigarettes while using e-cigs but did not experience significance in sustained smoking remission. Limitations of the study included a small sample size and recall bias. However, this preliminary data offers insights into e-cigarette use in a vulnerable population. Understanding the impact on disease activity will allow for improved disease management as well as counseling on appropriate smoking cessation methods.