American Gastroenterological Association Foundation-Sucampo-ASP Designated Research Award in Geriatric Gastroenterology



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PROJECT

"THE DIFFERENCES IN PHYSIOLOGIC MECHANISMS UNDERLYING CHRONIC CONSTIPATION IN ELDERLY VERSUS YOUNGER ADULTS WITH CONSTIPATION"

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onstipation is a highly prevalent symptom among adults 65 and older, and the frequency increases with age. Affecting up to 45% of the elderly population, it is anticipated that constipation will have a significant impact on the practice of gastroenterology in the near future. Primary constipation can be subdivided into slow transit constipation, dyssynergic defecation, or one with no identifiable physiological abnormalities. Such characterization of constipation helps to determine therapy. Currently, there is little information published regarding underlying physiologic abnormalities associated with constipation in the elderly.

As part of this research project, we will evaluate an elderly patient population with chronic constipation. The primary goal of this study is to better define the pathophysiologic mechanisms underlying constipation in the elderly and compare them with physiologic mechanisms in a younger adult population. We will also assess the correlation between symptoms and physical examination findings and defined physiologic abnormalities. These goals will be achieved through a prospective cohort study in which elderly and younger adults will be systemically evaluated through self-reported surveys, physical examination, and through colonic and anorectal anatomical and functional assessments. This multidisciplinary project will include clinical researchers from gastroenterology, geriatrics, and urogynecology. Patients will be recruited from several specialty clinics: Michigan Bowel Control Program Clinic, Functional Bowel Disorders Clinic, and Turner Geriatric Gastroenterology Clinic. Over sampling will be performed to obtain an adequate number of elderly patients 65 and older.

As there are a number of age-related changes in colonic as well as anorectal anatomy and function, the hypothesis is that pathophysiologic mechanisms underlying constipation in the elderly will be different than those reported in the general adult population. Specifically, we anticipate there will be a greater incidence of dyssynergic defecation in the elderly, which is characterized by the inability to coordinate the series of events which allow a person to evacuate stool. This study will provide novel information that will greatly advance understanding constipation in the elderly and how it differs from constipation in younger patients. The data will then be used to formulate future clinical outcome studies to address constipation in the elderly.

While engaging in this research, I also plan to pursue further training through the University of Michigan Clinical Research Design and Statistical Analysis Masters of Science Program. This intensive 20-month program will provide me with formal training in concepts and methods that relate to the purposes of clinical research, clinical epidemiology, clinical trials, program evaluation, and technology assessment.

With the support of my mentors and the generous American Gastroenterological Association Foundation-Sucampo-ASP Designated Research Award in Geriatric Gastroenterology, I anticipate the knowledge gained from this research project and skills acquired in the On Job/On Campus program will enable me to pursue further clinical research on constipation and other anorectal disorders in the elderly.