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

AWARD RECIPIENT

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PROJECT

"Shared Decision-Making for NSAID and Cardioprotective Drug Prescription Among Older Adults"

MENTORSHIP TEAM

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Concomitant prescription of non-steroidal anti-inflammatory drugs (NSAIDs) and cardioprotective medications is common. This polypharmacy precipitates substantial morbidity and mortality among the geriatric population. Gastrointestinal (GI) ulcers of the stomach and duodenum with potential for bleeding, obstruction, stricture, and perforation (i.e., upper GI events [UGIE]) occur in 1 out of every 7 elderly patients, accounting for 30% of UGIE-related hospitalizations and deaths. Variation in the platelet-inhibitory effects of NSAIDs may also contribute to increased rates of cardio- or cerebrovascular thrombotic events, such as myocardial infarction or stroke, a clinically significant risk given that half the patients using NSAIDs have co-existing cardiovascular disease. Additionally, patients with established heart disease or peripheral arterial disease are commonly prescribed acetylsalicylic acid, clopidogrel, and/or warfarin to impede progression of existing disease and reduce the risk of future morbid events (i.e., secondary cardioprotection). These secondary cardioprotective agents are independently associated with increased risk of UGIE.

Medication decision-making is also complicated by different patient and physician expectations regarding treatment goals. Physicians focus primarily on benefits, while elderly patients vary in value placed on disease prevention and tolerance for medication toxicity. This creates discordance in treatment goals that adversely affects clinical outcomes. The objective of this research agenda is to provide a methodological and geriatric contextual foundation for preference elicitation regarding NSAID and cardioprotective polypharmacy.

My group plans to explore key elements of medication decision-making associated with prescription of cardioprotective drugs concomitantly with an NSAID. We believe, to safely operationalize clinical guidelines, both physicians and patients must participate in medication decision-making (i.e., the geriatric concept of "shared decision-making"), and this process must reflect concordant preferences. Using future funding and this foundational work as a basis, we plan to develop and test a clinical decision aid that will enable physicians and patients to balance preferences for daily analgesia, cardioprevention, and the co-incident GI risks of NSAID polypharmacy, promoting safer NSAID prescription, while improving functional status and reducing adverse health outcomes of older adults.

With the support of the American Gastroenterological Association Foundation-Sucampo-ASP Designated Research Award in Geriatric Gastroenterology, I plan to contribute to evidence-based medicine by conducting methodologically rigorous clinical research to improve the medical decision-making process that surrounds the safer prescription of NSAIDs.