Pill Prep Problems? Erosive Gastritis and Peptic Ulcers Due To Sodium Sulfate-Based Tablet Prep

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Introduction

SUTAB is the second ever tablet formulation for bowel preparation. It became FDA approved in 2020 based on two randomized studies in which SUTAB provided noninferior bowel cleansing when compared to other commonly used FDA approved preparations. These randomized studies focused only on colonoscopies, possibly ignoring SUTAB's effects on the upper GI tract. Endoscopists have recently been noticing significant adverse side effects from SUTAB, notably erosive gastritis and peptic ulcers in patients scheduled for same day bidirectional endoscopy. These findings were not noted by the studies used for FDA approval. SUTAB is a sodium sulfate based tablet composed of three main active ingredients: sodium sulfate, magnesium sulfate, and potassium chloride. SUTAB is taken as a 2-day split dose regimen of 24 tablets with large volumes of water. The most common adverse side effects published for SUTAB include nausea, abdominal distension, vomiting, and abdominal discomfort. Any mention of mucosal ulcerations focused on colonic ulcerations in patients with suspected inflammatory bowel disease or in concurrence with the use of stimulant laxatives.

Case

5 cases of same day bidirectional endoscopy were examined from 9/2/2021 to 11/15/2021. Indications for upper endoscopy included a history of Barrett's esophagus and/or gastroesophageal acid reflux disease and all patients used SUTAB as the sole bowel preparation. In all cases there was no previous history of erosive gastritis or peptic ulcer disease, however, all upper endoscopies noted signs of moderate to severe erosive gastritis. Two of the cases also noted similarly appearing linear gastric ulcers with black eschars. All patients were subsequently placed on antacid therapy and follow-up endoscopies were performed to assess ulcer healing, which was noted at the time.

Discussion

SUTAB is a relatively new bowel preparation on the market with very little published data on its known side effects. The convenience of a tablet formulation for a bowel preparation that achieves successful bowel cleansing attracts patients and doctors, but it comes with the cost of possible adverse side effects in the upper GI tract. The ingredients in SUTAB are corrosive agents, specifically, potassium chloride has been linked to erosions that are found in the mucosa of the GI tract with prolonged exposure. To better understand this recently noted phenomena, more research is needed to help prevent these unwanted and potentially dangerous side effects.

Endoscopy Images