

# Gastric Ulcerations With the Newer Pill-Based Bowel Preparations for Colonoscopy: Modifications to Improve Patient Outcomes

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## Introduction

Pill-based preparations for endoscopy have become increasingly popular relative to liquid preparations due to patient preference and cleansing efficacy. SUTAB<sup>®</sup> (sodium sulfate, magnesium sulfate, and potassium chloride Tablets) is a newly FDA approved pill-based endoscopy preparation with a 92% successful cleansing rate in trials. SUTAB<sup>®</sup> on-label administration recommends consuming 12 tablets with 16 ounces of water within 30 minutes, followed by 32 ounces of water, on the day before and morning prior to pan-endoscopy. However, rapid consumption of tablets has been associated with chemically-induced ulceration. Here, we discuss two cases who underwent pan-endoscopy for iron deficiency anemia with findings of acute ulcerations and suggest recommendations for staggered pill consumption to improve patient outcomes.

### SUTAB SPLIT-DOSE REGIMEN

- Two SUTAB doses are required for a complete preparation:
  - Dose 1 consists of 12 tablets and 16 oz of water
  - Dose 2 consists of 12 tablets and 16 oz of water
  - Each dose is followed by two additional 16 oz of water
- ACG-recommended split-dose regimen<sup>5</sup>



Evening before colonoscopy:



5-8 hours before colonoscopy:



Tablets not shown actual size.

Figure 1. SUTAB<sup>®</sup> dosage overview.<sup>1</sup>

## Case Description and Methods

In case #1 (male, age 46), a pan-endoscopy was indicated for anemia, abdominal distention, and mild gastroesophageal reflux. Relevant findings on upper endoscopy were moderate gastritis and antral erosions/ulcerations (Figure 2). In case #2 (female, age 54), a pan-endoscopy was indicated for iron deficiency anemia. Relevant findings on upper exam included moderate gastritis, multiple antral erosions, and healing superficial antral ulcers with eschar (Figure 3). Standard SUTAB<sup>®</sup> on-label administration was followed. In the absence of prior symptoms/other causative etiology, erosions and ulcerations were deemed drug-induced.

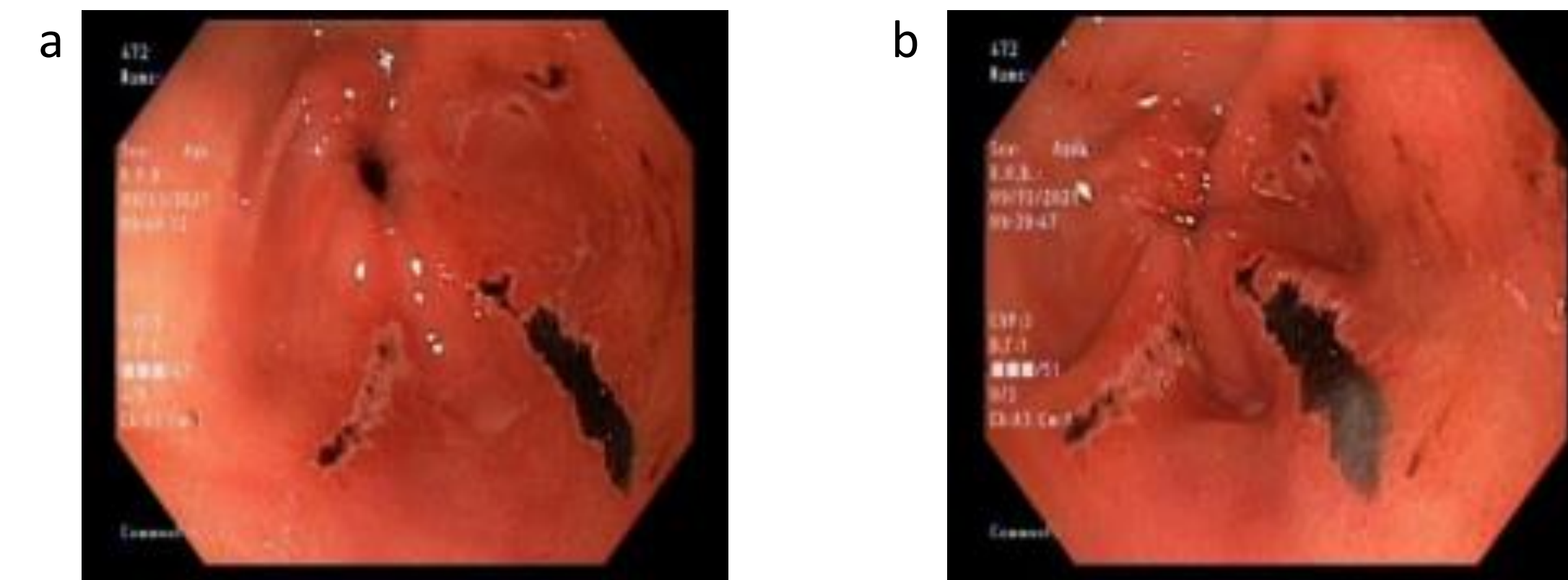


Figure 2. Images from case #1 exhibiting SUTAB<sup>®</sup> induced erosions and gastric ulcerations. a) antral ulcer, b) severe gastritis



Figure 3. Images from case #2 exhibiting SUTAB<sup>®</sup> induced erosions and gastric ulcerations. a) mild esophagitis, b) antral ulcer, c) antral erosions

## Results and Discussion

In all subsequent cases at our center warranting pan-endoscopy, we modified the manufacturer specified SUTAB<sup>®</sup> administration protocol, which involved consuming each of the 12 pills 5 minutes apart with 25 ounces of water, both on the day before and morning prior to pan-endoscopy. This staggered modified administration led to complete alleviation of the noted erosions/ulcerations in all subsequent cases.

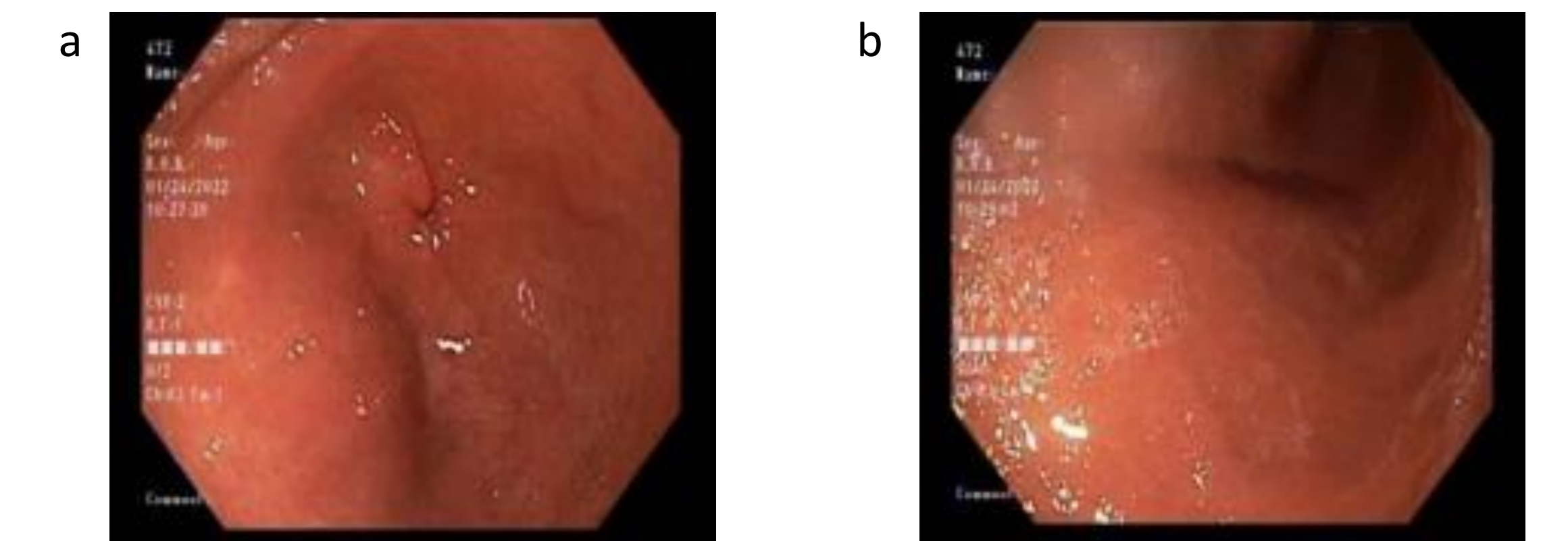


Figure 4. Images from follow-up of case #1 exhibiting alleviation of erosions and gastric ulcerations. a) antrum, b) gastritis

## Conclusions

Although pill-based endoscopy preparations are convenient, the current on-label stacked administration recommendations may cause gastric ulcerations. Physicians using the revised on-label SUTAB<sup>®</sup> administration may still find unexpected ulcerations/erosions without other causative etiology. An off-label modification of administration to further stagger the intake of each pill over 5 minutes (as opposed to the package recommended 2.5 minutes) may improve noted endoscopic patient outcomes and should be considered. The optimal pill intake protocols however need to be defined in studies in larger pools of patients.

## Contact

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## References

- <https://www.sutab.com/hcp/Dosing>