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ABOUT COVER

Editorial board member of *World Journal of Gastrointestinal Endoscopy*, Dr. Vedat Goral graduated medical school at Diyarbakir University (Turkey). He completed his PhD degree at Dicle University (Turkey) in 1986 and went abroad for postdoctoral study at Chiba University, School of Medicine Department of Gastroenterology, Japan (1990-1991), Giessen University, School of Medicine Department of Gastroenterology, Germany (1992) and the Chelsea & Westminster Hospital, Department of Gastroenterology, England (1998). He speaks English and Japanese, and his publication record spans English-language peer-reviewed journals covered by SCI and Turkish-language books. He has also published many abstracts at national and international congresses. Currently, Dr. Goral is Professor in the Department of Gastroenterology at Istanbul Medipol University School of Medicine. (L-Editor: Filipodia)

AIMS AND SCOPE

The primary aim of *World Journal of Gastrointestinal Endoscopy* (*WJGE*, *World J Gastrointest Endosc*) is to provide scholars and readers from various fields of gastrointestinal endoscopy with a platform to publish high-quality basic and clinical research articles and communicate their research findings online.

WJGE mainly publishes articles reporting research results and findings obtained in the field of gastrointestinal endoscopy and covering a wide range of topics including capsule endoscopy, colonoscopy, double-balloon enteroscopy, duodenoscopy, endoscopic retrograde cholangiopancreatography, endosonography, esophagoscopy, gastrointestinal endoscopy, gastroscopy, laparoscopy, natural orifice endoscopic surgery, proctoscopy, and sigmoidoscopy.

INDEXING/ABSTRACTING

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CASE REPORT

Curling ulcer in the setting of severe sunburn: A case report

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Abstract

BACKGROUND

While sunburns are very common, especially in pediatrics, curling ulcers secondary to sunburns are a very rare entity that has not been noted in the literature in over fifty years. This case is the first addition to the literature since the originally documented case.

CASE SUMMARY

A previously healthy 17 year old male presents to the emergency room with lethargy, shortness of breath on exertion, dark stools and nausea. His fatigue started to become significantly worse four days prior to admission. Approximately two weeks prior to admission, the patient was on a beach vacation with his family at which time he suffered severe sunburns. He had developed crampy epigastric abdominal pain, which was followed by dark, loose stools. On exam, he is non-toxic appearing, but with pallor and peeling skin on his face and chest with epigastric tenderness. Infectious stool studies were all negative including *Helicobacter pylori*. He denies use of any non-steroidal anti-inflammatory drugs and also denies alcohol or recreational drug use. While admitted he is found to be significantly anemic with his hemoglobin as low as 6.3 requiring two units of packed red blood cells. Endoscopy revealed several severe and deep ulcerations in the antrum and body of the stomach indicative of stress or curling ulcers.

CONCLUSION

While the incidence of stress ulcers is not known, it is most common with severe acute illness, most commonly presenting as upper gastrointestinal (GI) bleeding. It is essential to be aware of the risk of curling ulcers secondary to severe sunburns as patients with stress ulcer GI bleeding have increased morbidity and mortality compared to those who do not have GI bleed.

Key Words: Curling ulcer; Sunburn; Stress ulcer; Pediatrics; Gastroenterology; Gastrointestinal bleed; Case report

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Core Tip: While sunburns are very common, especially in pediatrics, curling ulcers secondary to sunburns are a very rare entity that has not been noted in the literature in over fifty years. Although a very rare consequence of sunburn, it is essential to be aware of the risk of curling ulcers secondary to severe sunburns as patients with stress ulcer gastrointestinal bleeding have increased morbidity and mortality compared to those who do not have gastrointestinal bleed.

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INTRODUCTION

Stress ulcers are a well-known clinical entity with various findings ranging from asymptomatic superficial lesions and occult gastrointestinal (GI) bleed to overt clinically significant GI bleeding. It is thought that this is typically due to gastric and sometimes esophageal or duodenal mucosal barrier is disruption[1]. When the etiology of the stress ulcer is a burn, they are characterized as curling ulcers. Most cases of curling ulcers in the current literature are secondary to severe systemic burns and although rare, there was one previous case report of curling ulcer secondary to sunburn[2].

CASE PRESENTATION

Chief complaints

A previously healthy 17 year old male presented to Stony Brook University Hospital from an outside hospital with lethargy, shortness of breath on exertion, dark stools and nausea.

History of present illness

The patient's fatigue had become significantly worse for four days prior to admission. Approximately two weeks prior to admission, the patient was on a beach vacation with his family at which time he suffered severe sunburns. He had developed crampy epigastric abdominal pain that was followed by dark, loose stools.

History of past illness

He has no significant past medical history.

Personal and family history

He and his family have no significant history.

Physical examination

On physical exam, he was pale and tired-appearing with epigastric tenderness.

Laboratory examinations

Infectious stool studies were all negative including *Helicobacter pylori*. His complete blood count revealed that he was significantly anemic with a hemoglobin of 6.3 and his complete metabolic panel was within normal limits.

Imaging examinations

No imaging was performed.

Further hospital course

Endoscopy was performed and revealed severe, deep ulcerations in the antrum and body of the stomach (Figure 1).

FINAL DIAGNOSIS

Curling ulcers in the antrum.

TREATMENT

The patient was treated with high dose proton-pump inhibitor and carafate along with iron and folate supplementation.

OUTCOME AND FOLLOW-UP

With time, the patient's symptoms and blood work improved. Five months after his original admission, endoscopy was performed and all previous areas of ulceration had completely resolved.

DISCUSSION

While the incidence of stress ulcers is not known, it typically occurs with severe acute illness, most commonly presenting as upper GI bleeding. Although stress ulcers can lead to perforation, it is very rare with less than 1% incidence[3]. An impaired mucosal barrier where the mucosal glycoprotein breaks down due to increased concentrations of refluxed bile salts or uremic toxins in the setting of critical illness may be the possible pathologic changes that lead to ulceration. Increased secretion of gastric acid secondary to higher secretion of gastrin during stress is likely as well[4].

CONCLUSION

Curling ulcers secondary to sunburns are a previously described phenomenon, but it is a rare entity that has not been noted in the literature in over fifty years[2]. It is essential to be aware of the risk of curling ulcers secondary to severe sunburns as patients with stress ulcer GI bleeding have increased morbidity and mortality when compared to those without GI bleed.

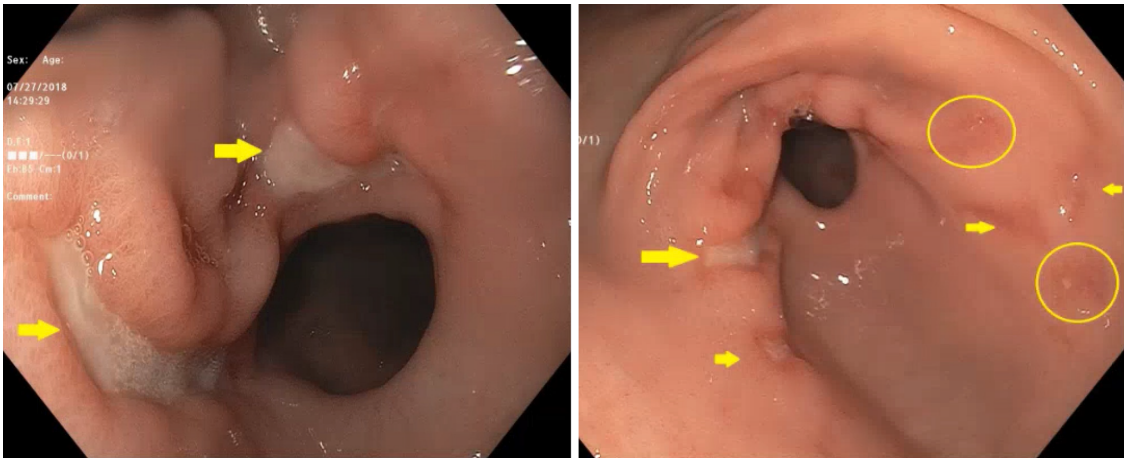

Figure 1 Deep ulcerations in the antrum of the stomach.

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