A 15-YEAR-OLD GIRL had a 3-day history of mild nausea and pain on swallowing. The pain began gradually immediately after swallowing and was characterized as a sharp and stabbing, localized near the left scapula. Swallowing liquids was more painful than swallowing solid foods. The pain was not present between swallows. She had eaten and drunk little during the past 2 days because of the pain and nausea. A 4-lb weight loss during the past week was confirmed. Standing upright resulted in dizziness.

Her medical history was notable for exercise-induced asthma. Smoking, drug use, and sexual activity were denied. Four days before presentation, after excision of an ingrown toenail, cephalexin (250-mg capsules, orally, every 6 hours) was prescribed. On further questioning, she recalled taking this medication with a small amount of fluid the day before symptoms began, during which time she encountered difficulty swallowing the capsule.

On physical examination the patient was without fever and showed mild signs of dehydration. The findings on examination were otherwise unremarkable. Results of a barium swallow were normal, but endoscopic examination revealed abnormal findings at the level of the mid esophagus (Figure).

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Pill Esophagitis

Figure. An endoscopic view of the mid esophagus shows 5 discrete ulcerations at the same level in a circumferential distribution.

Pill esophagitis is primarily the result of a chemical reaction between the released contents of a pill and the lining of the esophagus. Pressure necrosis may also play a role in the causation of this disorder. The characteristic site of pill esophagitis is the mid esophagus. More than 1000 cases of pill esophagitis have been reported during the last 30 years. It is likely, however, that many more cases have not been reported or have been misdiagnosed.

The presenting symptom of this disorder is odynophagia (pain on swallowing), with or without dysphagia. The odynophagia is sudden in onset. Although a history of difficulty swallowing a pill followed by pain on swallowing is most suggestive of this disorder, this history may not be present.

Differential Diagnosis and Complications

The differential diagnosis of pill esophagitis includes viral, fungal, and, rarely, bacterial esophagitis. Candida and herpes simplex virus are the most common infectious agents causing esophagitis. Gastroesophageal reflux may cause similar symptoms. Both infectious esophagitis and gastroesophageal reflux typically have a more gradual onset of symptoms and are characterized by burning esophageal pain unrelated to swallowing. Complications of pill esophagitis include hemorrhage, particularly when caused by nonsteroidal anti-inflammatory drugs, esophageal perforation, mediastinitis, and stricture formation.

Diagnosis

History alone suggests the diagnosis, although endoscopy findings are definitive. Endoscopy is indicated in the evaluation of odynophagia in immunocompromised patients, in individuals with progressive and prolonged symptoms, in those with excessive dysphagia or hemorrhage, and when the diagnosis is in doubt. The endoscopic finding of ulcerations located at one level circumferentially in the mid esophagus is most suggestive of this disorder.

Treatment and Prevention

Although the benefit of treatment of pill esophagitis is unproven, sucralfate and use of agents that result in acid suppression may promote faster healing. Resolution in symptoms generally occurs in a few days to weeks. To avoid the occurrence of pill esophagitis, patients should be instructed to drink sufficient amounts of fluids with the medication and to remain upright for at least 10 minutes. Additional caution should be given to bedridden patients with strictures or esophageal dysmotility who are at a greater risk for developing this complication.

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References