Severe, Long-Lasting Symptoms from Doxycycline-Induced Esophageal Injury

Tetracycline derivates (especially doxycycline) are among the most common causes of medication-induced esophageal injury (1,2). This condition is characterized by single or multiple ulcers in the mid-esophagus resulting in retrosternal burning pain associated with dysphagia and odynophagia (1,2). These symptoms are often self-limiting and in most cases resolve within days to a week. We observed severe and long-lasting esophageal injury due to doxycycline in three patients. All were female patients with pelvic inflammatory disease, and the symptoms described above appeared between the second and seventh day of treatment. Esophagoscopy revealed friable mucosa with exudates and ulcers in the mid-esophagus (Figure 1). The symptoms were so severe that none were able to ingest anything orally and thus had to be hospitalized for parenteral nutrition (average hospital stay: 7 days). The pain resolved 2 to 5 weeks after its onset. We also noticed discordance between the severity of the patient’s symptoms and findings on esophagoscopy. If present, ulcers were small. The major endoscopic findings were exudates that involved relatively short segments of the esophagus. These were quite mild compared to the more severe findings in other forms of esophagitis, in which symptoms are not as disabling as in our patients. In conclusion, doxycycline-induced esophageal injury may present with severe symptoms and the course may be long lasting (up to six weeks). Considering the discordance between severe symptoms and relatively minor endoscopic findings, motility disorders along with the direct injury may be involved in the pathogenesis of this condition.


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