CLINICAL CASE

HERPETIC ESOPHAGITIS IN A YOUNG IMMUNOCOMPETENT PATIENT: AN UNUSUAL CAUSE OF SEVERE ODYNOPHAGIA. A CASE REPORT.

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Abstract

Introduction: Herpetic esophagitis is a rare cause of severe odynophagia associated with immunocompromised patients, although cases have also been reported in young immunocompetent individuals.

Case Presentation: A 19-year-old woman presented with a five-day history of retrosternal pain and odynophagia, with near-complete inability to tolerate oral intake. She was initially treated for tonsillitis without improvement. Examination revealed a mildly hyperemic oropharynx, and laboratory tests showed elevated acute-phase reactants. Upper gastrointestinal endoscopy revealed multiple superficial serpentine ulcers in the middle and proximal esophagus, and fibrinous erosions at the esophagogastric junction. Biopsies were taken from the margins and base of the ulcers. Empirical treatment with oral acyclovir was initiated, resulting in complete clinical resolution after seven days. Histological examination and detection of HSV-1 in the biopsy confirmed the diagnosis of herpetic esophagitis in an immunocompetent patient.

Discussion: Herpetic esophagitis should be considered in the differential diagnosis of severe odynophagia and retrosternal pain in immunocompetent young adults. The typical endoscopic pattern of small ulcers with preserved adjacent mucosa guides the diagnosis, which must be confirmed by histopathological examination and viral detection techniques. Early treatment with acyclovir accelerates symptom resolution and reduces the risk of complications, with an excellent prognosis in immunocompetent patients.

Keywords: herpetic esophagitis, odynophagia, herpes simplex virus, immunocompetent, gastrointestinal endoscopy.

Introduction

Infectious esophagitis is a rare condition in clinical practice, generally associated with immunocompromised patients, such as those with HIV infection, transplant recipients, or patients on immunosuppressive therapy. Notable causes

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include herpes simplex virus type 1 (HSV-1), cytomegalovirus (CMV), and Candida albicans. Of these, HSV-1 accounts for less than 10 % of cases, usually in the context of immunosuppression, although cases have been reported in immunocompetent individuals, particularly young adults.

Herpetic esophagitis typically presents with severe retrosternal pain and odynophagia that limits food intake and may be accompanied by dysphagia, fever, or general malaise. It is usually caused by direct contact of the virus with the esophageal mucosa following an acute oropharyngeal infection or reactivation of a latent viral infection in the vagus nerve or esophageal plexus. Diagnosis is based on endoscopy and histological confirmation or PCR detection of the virus in a biopsy specimen. Treatment with acyclovir accelerates clinical resolution and prevents complications.

The following is a case report of herpetic esophagitis diagnosed in an immunocompetent female patient, whose clinical presentation initially mimicked an otolaryngological condition. Informed consent was obtained from the patient for the publication of the case and the endoscopic images, ensuring that the data were anonymized.

Case presentation

A 19-year-old woman with no medical history or clinical findings suggestive of known immunosuppression presented to the emergency department three times in the past 24 hours with low retrosternal pain that had been present for 5 days. The patient described the pain as a continuous, burning sensation that worsened after eating and progressively increased in intensity, eventually preventing her from eating solids. She did not experience episodes of choking, excessive salivation, a foreign body sensation, or oropharyngeal dysphagia. Additionally, her symptoms were accompanied by an isolated fever spike of 38°C the previous day. One week earlier, the patient had begun antibiotic and corticosteroid therapy (40 mg of prednisone daily for 5 days) for suspected bacterial tonsillitis after being evaluated at her local health center for odynophagia; however, she showed no clinical improvement.

On physical examination, the patient appeared in good general condition, with mild oropharyngeal hyperemia but no tonsillar hypertrophy or exudate. No palpable lymphadenopathy was noted. Cardiopulmonary auscultation and abdominal examination were unremarkable.

Laboratory findings revealed mild leukocytosis with neutrophilia, along with elevated C-reactive protein (70 mg/L). The chest X-ray showed no significant findings. Given the persistence of retrosternal pain and the exclusion of otolaryngological or pulmonary causes, it was decided to complete the evaluation with an urgent upper gastrointestinal endoscopy.

The examination was performed up to the second portion of the duodenum, revealing, upon retraction, two circular fibrinous erosions measuring 3–4 mm, with preserved adjacent mucosa, at the esophagogastric junction (see Figure 1). In addition, the patient also presented with several superficial ulcerated lesions arranged in a linear pattern with a serpiginous appearance in the middle and proximal esophagus, suggestive of a viral etiology (see Figure 2). Samples were taken from the edge and base of the ulcers for histopathological and microbiological examination.

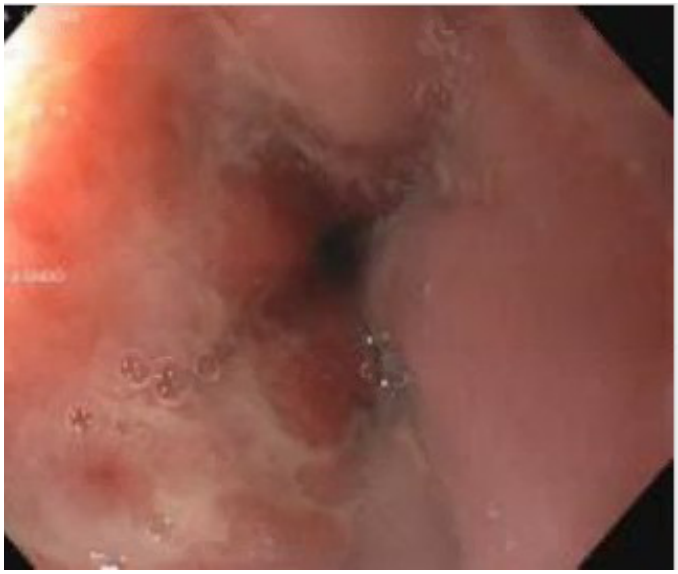


*Figure 1. **Upper gastrointestinal endoscopy: Two circular fibrinous erosions, 3–4 mm in diameter, are visible at the esophagogastric mucosal junction, with the surrounding mucosa appearing normal.***

Following the endoscopic findings of esophagitis of probable infectious origin, empirical outpatient treatment was initiated with oral acyclovir 400 mg every 8 hours for 7 days, given the suspicion of herpetic esophagitis.

Finally, the patient was re-evaluated during a follow-up visit 4 weeks later, showing complete resolution of her symptoms following completion of antiviral treatment. Microbiological testing using polymerase chain reaction (PCR) yielded a positive result for HSV-1, while she tested negative for HSV-2 and CMV. In addition, histopathological examination of the biopsies revealed ballooning degeneration of epithelial cells, the presence of characteristic intranuclear eosinophilic inclusion bodies, and a cytopathic effect consistent with HSV-1 infection;

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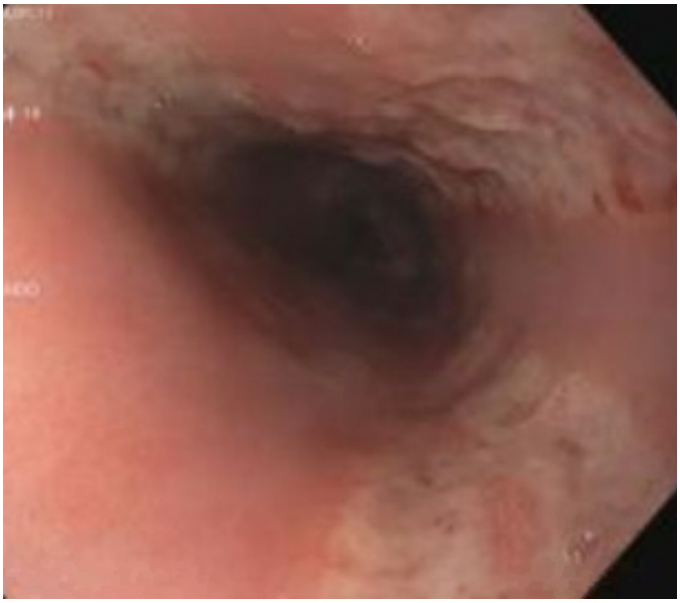


Figure 2. ***Upper gastrointestinal endoscopy: Several superficial, serpiginous-appearing ulcers are observed in the middle and proximal esophagus.***

the diagnosis was confirmed by immunohistochemistry, which was positive for HSV-1 and negative for CMV.

Discussion

Herpetic esophagitis is an acute infection of the esophageal mucosa usually caused by herpes simplex virus type 1 (HSV-1), although type 2 may also be involved to a lesser extent[1]. Its overall incidence is low and it has been described primarily in immunocompromised patients; however, in recent years, numerous cases have been reported in immunocompetent individuals, particularly young adults[2,3]. In this group, the infection usually presents as an acute, self-limiting condition, although the severity of symptoms can be striking and lead to repeated visits to the emergency department[1].

The most widely accepted pathogenic mechanism in immunocompetent patients is local spread from an oropharyngeal focus, usually in the context of primary herpesvirus infection, although reactivation of latent infection in the vagal plexus or oesophageal mucosa has also been proposed[4-6]. Local factors, such as microtrauma, acid reflux or short courses of corticosteroid therapy, may facilitate viral replication and initial epithelial damage[5,6]. In our case, the history of a brief course of systemic corticosteroid therapy probably acted as a predisposing factor in an otherwise healthy mucosa.

From a clinical standpoint, the classic triad of odynophagia (60–76%), retrosternal pain (46–50%), and fever (44–52%) characterizes the presentation of herpetic esophagitis in immunocompetent individuals; other symptoms, such as dysphagia or general malaise, may occur less frequently[1-3]. Oropharyngeal examination may be normal or show only mild inflammatory changes, and herpetic lesions on the lips or in the mouth are observed in only a minority of cases, which contributes to the initial consideration of alternative diagnoses such as pharyngotonsillitis or functional disorders[1,3]. This clinical pattern is consistent with the case described here, in which retrosternal pain and progressive odynophagia were the predominant symptoms and led to several visits to the emergency department before an esophageal cause was suspected.

Upper gastrointestinal endoscopy is the essential tool for diagnosing suspected cases[1-3]. Typical findings include multiple small, superficial, rounded, or "geographic-appearing" ulcers with well-defined margins and relatively intact adjacent mucosa, located primarily in the middle and distal thirds of the esophagus[7-9]. This pattern allows herpetic esophagitis

Aetiology	Characteristic endoscopic findings	Key features
Candida albicans	·Adherent whitish or yellowish plaques with a cotton-wool appearance ·Plaques may coalesce, leaving erythematous or friable mucosa when dislodged.	·The most typical form of infectious oesophagitis. ·Plaques do not usually come away with simple irrigation.
Herpes simplex virus (HSV)	·Multiple small, round, superficial ulcers with a volcano-like appearance, sometimes with a necrotic base. ·Ulcers may coalesce into larger lesions.	·Usually affects the mid-to-distal oesophagus. ·Ulcers tend to be small and superficial.
Cytomegalovirus (CMV)	·Large, deep, linear or longitudinal ulcers. ·Solitary or few in number, with well-defined margins.	Lesions tend to be deeper and more extensive than those caused by HSV.
Human immunodeficiency virus (HIV)	·Any of the above patterns may be observed, depending on the causative pathogen. ·Mixed or non-specific lesions may occur in some cases.	Endoscopic findings alone cannot identify the causative agent; biopsy is essential.

Tabla 1. ***Differential endoscopic findings in infectious esophagitis.***

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to be distinguished from other infectious causes (see Table 1), such as candidal esophagitis, which is characterized by confluent whitish plaques, or cytomegalovirus esophagitis, in which larger and deeper ulcers predominate, usually in the distal thir [7,8]. In the case presented, the presence of superficial serpentine ulcers in the upper-middle esophagus and fibrinous erosions at the esophagogastric junction was highly suggestive of infectious esophagitis of probable herpetic origin.

However, a definitive diagnosis requires confirmation through histopathological examination and/or viral detection techniques on biopsy specimens[10]. Characteristically, ballooning degeneration of squamous cells, multinucleation, and type A Cowdry intranuclear inclusion bodies are observed, which are considered pathognomonic findings of herpes infection[1,2,10]. Detection of HSV-1 via immunohistochemistry or PCR in the biopsy specimen increases diagnostic sensitivity and allows differentiation from other viral infections[10]. In our patient, the histopathological finding of typical cytopathic changes and a positive immunohistochemical result for HSV-1, together with the detection of HSV-1 in the biopsy via PCR, confirmed the endoscopic suspicion.

The standard treatment for herpetic esophagitis is based on the use of acyclovir, a nucleoside analog that inhibits viral DNA polymerase[5,6]. In immunocompetent patients with uncomplicated disease, the most commonly used regimen is oral acyclovir 400 mg every 8 hours for 7 to 10 days, with rapid improvement in odynophagia and retrosternal pain in most cases[2-4]. In immunocompromised patients, those with severe disease, or those who cannot tolerate oral administration, intravenous administration of the drug is recommended[11]. Although cases of spontaneous resolution without antiviral treatment have been reported, several studies suggest that early initiation of acyclovir shortens the duration of symptoms by reducing viral replication and the occurrence of complications resulting from poor oral tolerance, such as dehydration or nutritional deterioration; therefore, its use is considered reasonable even in immunocompetent patients with severe clinical presentation[2,4,11].

The course of herpetic esophagitis in immunocompetent individuals is generally favorable, with complete resolution of symptoms within one or two weeks and a low recurrence rate[1-3,5]. Nevertheless, during the initial evaluation, it is advisable to rule out underlying immunosuppressive conditions, such as HIV infection, neoplasms, or immunomodulatory treatments, especially if the presentation is atypical or the course is prolonged[1,4]. In our case, the absence of clinical and laboratory findings suggestive of immunodeficiency, along with the rapid response to treatment, support the self-limiting nature of the condition.

The case presented illustrates several issues relevant to daily clinical practice. First, it highlights that herpetic esophagitis should be included in the differential diagnosis of severe odynophagia and retrosternal pain in previously healthy young adults, especially when the ENT examination is normal and there is no response to conventional treatments[1-3]. Second, it highlights the key role of early endoscopy in identifying the characteristic ulcerated lesions and obtaining targeted biopsies[1-3,7,10]. Finally, it underscores that treatment with oral acyclovir leads to rapid clinical improvement and complete resolution of symptoms in most immunocompetent patients, minimizing the risk of complications and avoiding unnecessary additional investigations[2-4].

Bibliography

1. *Ramanathan J, Rammouni M, Baran J, Khatib R. Herpes simplex virus esophagitis in the immunocompetent host: an overview. Am J Gastroenterol. septiembre de 2000;95(9):2171-6.*

2. *Galbraith JCT, Shafran SD. Herpes Simplex Esophagitis in the Immunocompetent Patient: Report of Four Cases and Review. Clin Infect Dis. 1 de abril de 1992;14(4):894-901.*

3. *Canalejo E, García Durán F, Cabello N, García Martínez J. Herpes Esophagitis in Healthy Adults and Adolescents: Report of 3 Cases and Review of the Literature. Medicine (Baltimore). julio de 2010;89(4):204-210*

4. *Diezma-Martín AM, Gigante-Miravalles E, Castro Limo JD, Quimbayo Arcila CA, Puche Paniagua JJ. Herpetic esophagitis in immunocompentent host: cases report. BMC Infect Dis. 17 de agosto de 2020;20:605.*

5. *Hoversten P, Kamboj AK, Wu TT, Katzka DA. Variations in the Clinical Course of Patients with Herpes Simplex Virus Esophagitis Based on Immunocompetence and Presence of Underlying Esophageal Disease. Dig Dis Sci. 1 de julio de 2019;64(7):1893-900.*

6. *O'Donnell JEM, Krishnan U. Infectious Esophagitis in Children. J Pediatr Gastroenterol Nutr. 2022;75(5):556-63.*

7. *Reddy CA, McGowan E, Yadlapati R, Peterson K. AGA Clinical Practice Update on Esophageal Dysfunction Due to Disordered Immunity and Infection: Expert Review. Clin Gastroenterol Hepatol. 1 de diciembre de 2024;22(12):2378-87.*

DOI: 10.37352/2026495.2

8. *Jung KH, Choi J, Gong EJ, Lee JH, Choi KD, Song HJ, et al. Can endoscopists differentiate cytomegalovirus esophagitis from herpes simplex virus esophagitis based on gross endoscopic findings? Medicine (Baltimore). 7 de junio de 2019;98(23):e15845.*

9. *León Sanjuan GF, Aguilar Martínez JC, Molina Jiménez L. Esofagitis por herpes simplex en inmunocompetentes: entidad poco frecuente a tener en cuenta. RAPD Online. 1 de enero-febrero de2026;49:36-37*

10. *Miller JM, Binnicker MJ, Campbell S, Carroll KC, Chapin KC, Gonzalez MD, et al. Guide to Utilization of the Microbiology Laboratory for Diagnosis of Infectious Diseases: 2024 Update by the Infectious Diseases Society of America (IDSA) and the American Society for Microbiology (ASM) . Clin Infect Dis. 5 de marzo de 2024;ciae104.*

11. *Kurahara K, Aoyagi K, Nakamura S, Kuwano Y, Yamamoto C, Iida M, et al. Treatment of herpes simplex esophagitis in an immunocompetent patient with intravenous acyclovir: A case report and review of the literature. Off J Am Coll Gastroenterol ACG. noviembre de 1998;93(11):2239.*

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