

TITLE PAGE

Title:

Herpes Esophagitis Presenting as Vocal Fold Palsy in Immunocompetent Host

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Key Words: herpes esophagitis, dysphagia, vocal fold palsy, immunocompetent,

husky voice

Introduction

Herpes esophagitis presents a clinical diagnostic challenge. We report the first case of herpes esophagitis presenting as vocal fold palsy in an immunocompetent host. Our case highlights the importance of performing a detailed laryngoscopic examination in any patient with prolonged husky voice.

Case Report

A previously healthy 50-year-old man presented in our emergency department with a 10-day history of dysphagia associated with a husky voice and odynophagia. He had difficulty swallowing liquids, solids and his own saliva. He had no fever, chest pain, heartburn, epigastric pain or weight loss. His physical examination was unremarkable. His temperature was 36.5°C, and other vital signs were normal. Blood tests showed an elevated white blood count (10590/ μ l; the normal range is less than 10390/ μ l), an elevated platelet count (405000/ μ l; the normal range is less than 400000/ μ l), elevated aspartate transaminase (AST) (48 IU/L the normal range is less than 34 IU/L), elevated alanine transaminase (ALT) (83 IU/L; the normal range is less than 40 IU/L). Serological testing showed positive results for IgG and IgM antibodies against herpes simplex virus type I (by enzyme immunoassay), herpes simplex virus type II and varicella-zoster virus. Both positive titer of IgG and IgM antibodies mean reactivation

or cross reaction. The titer of serum IgG antibody against cytomegalovirus (by enzyme immunoassay) was 41 AU/ml (the normal range is less than 4 AU/ml). Our case showed positive titer of IgG antibody and a negative titer of IgM antibody against cytomegalovirus reveal prior infection. Blood test showed negative titer of HIV antibody. Chest x-ray and electrocardiogram were unremarkable. Laryngoscopy revealed right vocal fold palsy with saliva pooling over the right hypopharynx and a right arytenoid ulcerative lesion (Figure 1). Panendoscopy showed a longitudinal, whitish ulcerative lesion about 20 cm from the incisor teeth (Figure 2). Histological examination revealed multinucleated giant cells and nuclear molding (Figure 3). Pathology confirmed the diagnosis of herpes esophagitis. Upon follow-up one month later, the patient had no difficulty swallowing, no pain during swallowing and no vocal paralysis. His clinical symptoms had improved without the prescription of antiviral drugs. The recovery was uneventful. This case was approved by the China Medical University Hospital's Joint Institutional Review Board.

Discussion

The first case of herpes esophagitis was reported in 1940 by Johnson¹. This disease is usually found in immunocompromised hosts; it is rare in otherwise healthy patients.

The most common initial presentations of herpes esophagitis include odynophagia,

heartburn and fever², often with an acute onset. Endoscopy usually reveals ulceration over the mid-distal esophagus. Serology is a less invasive supplementary test. The specificity of serology is limited because 90% of the healthy population may have prior exposure to HSV and may therefore have IgG antibodies, with or without IgM². The most effective diagnostic method for herpes esophagitis is histology². A PubMed search of the period from 1970 to the present showed no reports of a scenario similar to ours. To the best of our knowledge, we report the first case of herpes esophagitis presenting as vocal fold palsy in an immunocompetent host. Clinicians should remember that vocal fold palsy can be a presentation of herpes esophagitis. Herpes esophagitis should be suspected even in an immunocompetent host who presents with severe dysphagia and a husky voice. Dysphagia is a multifactorial problem. Dysphagia can be classified into five different classes, oral, pharyngeal, laryngeal, esophageal and cortical³. Severe complications of herpes esophagitis including bleeding and esophageal perforation have been reported in immunocompetent patients^{4,5}. Close follow-up is needed in cases of herpes esophagitis to avoid severe complications. The benefit of antiviral agents remains unknown. No antiviral therapy was given in this case because clinical conditions had improved when a definite histology diagnosis of herpes esophagitis was made. Antiviral therapy is not recommended for immunocompetent patients whom already had clinical improvement

of symptoms. Herpes disease is common in patients with HIV infections or patients with underlying malignancies and transplant recipients. So, we suggest a detail history taking and a HIV testing in patients of herpes esophagitis. An early and correct diagnosis can improve quality of life and even save the life of the patient. Further studies are needed to clarify the mechanism of vocal fold palsy in the presentation of herpes esophagitis.

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Legends for Figures

Figure 1

Laryngoscopy revealed right vocal fold palsy with saliva pooling over the right hypopharynx and a right arytenoid ulcerative lesion

Figure 2

Panendoscopy showed a longitudinal, whitish ulcerative lesion about 20 cm from the incisor teeth

Figure 3

Histological examination revealed multinucleated giant cells and nuclear molding (hematoxylin & eosin stain 1:400)