Herpes Simplex Encephalitis Presenting with Isolated Ninth Cranial Nerve Palsy: A Case Report

İzole Dokuzuncu Kranial Sirir Paralizisi İle Başvuran Herpes Simpleks Ensefaliti: Olgu Sunumu

Sema ŞANAL BAŞ, Semiha Orhan, Erman ŞEN, Yunus TÜRKMEN, Birgül YELKEN

ABSTRACT
Herpes simplex virus is the most common cause of acute sporadic viral encephalitis. Mortality is over 70% in untreated cases. Clinical diagnosis of the disease is difficult. Routine laboratory results are generally nonspecific. Here, we consider the present case worthy to be presented because we demonstrated for the first time that herpes simplex encephalitis may manifest with isolated ninth cranial nerve palsy based on a patient, who presented at the age of 27 years with dysphagia and loss of sense of taste, had MRI and EEG findings consistent with herpes encephalitis, and improved with acyclovir therapy without complication.

Key words: Herpes simplex, encephalitides, glossopharyngeal motor neuropathies, acyclovir

ÖZ

Anahtar kelimeler: Herpes simpleks, ensefaliti, glossopharyngeal sirir noropati, asiklovir

Introduction
Herpetic encephalitis is the most common and the highest mortality of encephalitis (1-5). It is clinically characterized by high fever, headache, and confusion. Focal or generalized seizures may also occur. There may be severe neurological condition progressing from psychotic behavioral disorders, hemiplegia, speech disorders and amnesia to stupor and coma (4-9). Here we present the case with herpes encephalitis who presented with dysphagia and loss of sense of taste and improved without complication with acyclovir therapy after diagnosed with herpes encephalitis, we have shown that it is possible to present with 9th cranial nerve paralysis for the first time in herpes encephalitis cases that may present with atypical admissions.

Case Report
Personal and family history of the 27-year-old female patient, who presented with reduced oral intake, difficulty in swallowing and loss of sense of taste, was unremarkable. Her physical examination revealed good general status and clear consciousness. Her arterial blood pressure was 120/80 mmHg, radial pulse was 88/minute, body temperature was 38°C, and respiration rate was 22/minute. Her gag reflex was diminished and her voice was hoarse with a nasal twang. Her tongue deviated to the right side when asked to protrude. There was no neck stiffness or signs of meningeal irritation. Her laboratory analyses demonstrated a leukocyte count of 13.100/mm³ (5.200–12.400/mm³), hemoglobin value of 13.4 g/dl (12–18 g/dl), hematocrit concentration of 40.1% (37–52%), and
Although CSF pressure is usually high, the literature suggests that laboratory findings are not specific to herpes encephalitis. This is because the virus can spread retrogradely from the peripheral neurons to the brain in advanced ages (3-5,8,9).

While encephalitis clinic occurs due to a primary disease in children and young adults, it occurs due to retrograde spread of the virus to the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin.

HSV enters the system most frequently through the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin.

The virus enters the system most frequently through the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin. This is because the virus needs to reach the central nervous system via the oropharyngeal mucosa and rarely through the conjunctiva and damaged skin.

It is possible to make the diagnosis of herpes encephalitis early by cranial imaging considering the disease in the patients presenting with headache, fever, epileptic seizure, etc.; furthermore, prevention of the related potential severe morbidity and mortality is also possible with early treatment (1-3,7-9). Clinical signs of HSV encephalitis start with two-three-day of prodromal period, which generally include fatigue, fever and headache. Subsequently, the clinical picture may progress to seizures, hemiplegia, dysarthria, amnesia, stupor and even coma (2-5). The present case did not have a prodromal period and also presented with loss of sense of taste and dysphagia contrary to the expected neurological picture. Afterwards, the clinical picture of the case worsened rapidly.

Dysphagia is a symptom occurring due to mechanical prevention of the food transfer from mouth to the stomach and decreased strength or impaired coordination of the muscles that help swallowing. Oropharyngeal dysphagia results usually from neurological, myopathic and metabolic reasons. The reason may sometimes be a simple sore throat, or it can occur due to stroke, head trauma, Bell’s palsy or a metabolic encephalopathy (5-9). The loss of sense of taste, which was the other complaint of the present case, is usually ignored as it is not a life-threatening sign. The differential diagnosis includes many reasons as dysphagia. It can develop due to either a simple reason as poor oral hygiene or to a neurological disease such as head trauma, multiple sclerosis and Parkinson disease (5,7). Regarding this case presenting with dysphagia and loss of sense of taste, the literature reports no herpes encephalitis case presenting with these complaints. In this case, in which ninth cranial nerve palsy was suspected based on her complaints, the radiological methods ruled out tumor, varicella zoster infection and cranial hemorrhage, which might cause similar symptoms, in the differential diagnosis. The fact that the patient’s clinical picture improved with the improvement of herpes encephalitis confirmed the diagnosis.

Conclusion

The present study considered worth reporting in order to underline that herpes encephalitis, which is a rare condition with high mortality and morbidity rates in untreated or late-treated cases, may present with isolated ninth cranial nerve palsy, which has not been reported in the literature yet, and that it can be even improved with treatment without sequel.
References

5. Shoaib M, Kraus JJ, Khan MT. Herpes Simplex Virus Encephalitis: Atypical Presentation as a Right Middle Cerebral Artery Stroke. Cureus 2018; 15:10: e2067. [CrossRef]