

Case Report

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The Importance of Rehabilitation of Varicella Zoster Virus Neuropathy with Dysphagia: A Case Report and Literature Review

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Abstract

Dysphagia due to the varicella zoster virus (VZV) infection has the type of the main constituent Hunt syndrome and dysphagia of the main constituent a facial paralysis. The difference is considered to be the thing due to the ganglionic site which a virus reactivated. We report a case of the rehabilitation for dysphagia due to the VZV viral infection.

Keywords: Rehabilitation; Varicella zoster virus; Dysphagia

Case Report

A 76-year-old-female patient came to a nearby hospital with a sore throat and hoarseness in August, 2016. In acknowledgement of laryngeal edema, she was admitted to other hospital and did tracheotomy.



Figure 1: There was left vocal cord paralysis, and the vocal cord were fixed in a cadaveric position in the videoendoscopy at admission.

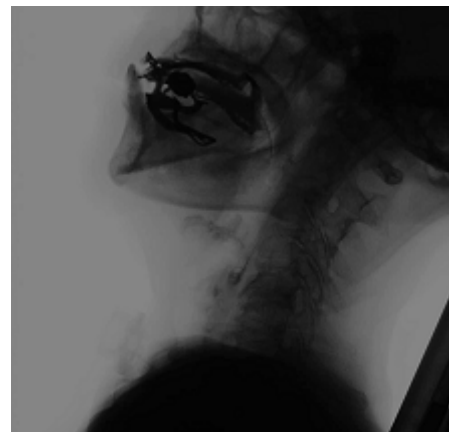


Figure 2: There was the remaining, but the remaining was able to be eliminated by adding deglutition in the videofluorography at admission.

VZV IgG rose by a blood test, and VZV virus neuropathy with dysphagia was diagnosed. She was admitted to the hospital for rehabilitation 65 days later. The Barthel index (BI) was 80 point and she had diabetes, hypertension, a gastric ulcer, but the control was good. The soft palate and lingual were normal. Left vocal cord paralysis was detected in swallowing videoendoscopy (VE) at admission, and the left vocal cord was fixed in a cadaveric position (Figure 1).

Also, a larynx had remaining swallowing videofluorography (VF), but the remaining removal was possible in additional deglutition and compensation movement (Figure 2).

There was a larynx invasion and a diet was paste foods and ate in 60 degrees reclining position, cervical rotation rank. The rehabilitation program trained her for dysphagia directly and conducted muscular strength reinforcement for muscle weakness. The diet was ingested by tube feeding two weeks before she was admitted, and she continued a paste meal after admission. There was not the aspiration in 90 degrees

locus and an original medium rank and we carved with diet form and, in VF one month later, did it in a meal.



Figure 3: Pharyngeal paralysis was improved and there was not the velopharyngeal insufficiency in the videoendoscopy at discharge.

She removed a cannula 109 days after the onset, and became calm and finally became able to almost take in general diet with nothing. The ADL became independent, and the FIM became 126 points and became the home discharge 131 days after the onset. In VE at discharge, pharyngeal paralysis was improved and there was not the velopharyngeal insufficiency (Figures 3 and 4).



Figure 4: There was the remaining, but the larynx movement was improved in the videofluorography at discharge.

In VF at discharge, a larynx had the remaining, but the movement was improved. Because a little larynx invasion was found when we consumed water, we taught it to drink by small quantity.

Discussion

The cause of the mixed laryngeal nerve paralysis is vascular and is neoplastic, and there is postoperative infectivity. The reports of the viral mixed laryngeal nerve paralysis increased [1-7].

The diagnosis is confirmed by demonstration of VZV-DNA or VZV-antibodies in the CSF [8,9]. If there is unilateral herpes zoster infection of the larynx, insilateral LCN may be affected [10]. Our case had a diagnosis in VZV antibody in the CSF similarly.

As for the treatment, an anti-viral drug, a steroid, multiple treatments including the rehabilitation [5] are provided. Speech therapy rehabilitation in the associated laryngeal paralysis reports on the Farri et al. [11] that it is improved the quality of life in 2007. Our case was given speech therapy too. And instruction and exercise therapy of the positioning that, in addition, was appropriate were provided in addition, and a deglutition function improved it.

It is reported that VE and VF is useful for a deglutition usability test [12,13]. In our case, we could confirm the paralytic pattern and deglutition situation in VE, VF, and there was training without pneumonia being caused.

Conclusion

VZV neuropathy with dysphagia in elderly people rarely had a poor prognosis [7,8], but, by appropriate treatment and rehabilitation treatment, was able to acquire a good function. Also, we were able to prevent pneumonia by managing the cannula for a long term.

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Authors' Contributions

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