Video endoscopic finding of acute laryngitis caused by SARS-CoV-2 during the Omicron variant wave

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Abstract
A 44-year-old male, who was diagnosed with SARS-CoV-2/Omicron variant, reported strong sore throat and difficulty swallowing after hospitalization. The rhino-laryngo flexible video endoscopy, which was conducted for excluding acute epiglottis, showed necrotic lesion localized to the supraglottic, glottic and subglottic area, and mildly edematous arytenoids. Meanwhile, no findings of acute epiglottitis were found. Based on the endoscopic findings, I considered that acute laryngitis was caused by Omicron variant, and strong sore throat and difficulty swallowing were developed. He received an oral painkiller and no supplemental oxygen were administered. After several days, his symptoms resolved. The Omicron variant is more likely to infect the upper respiratory tract than the lower respiratory system, and main symptoms caused by the Omicron variant consist of upper respiratory tract symptoms, such as sore throat. The diffuse necrotic lesion seen in the larynx in this case could be a characteristic of acute laryngitis caused by the Omicron variant.

Full Text
A 44-year-old man visited our hospital one morning with a fever of over 37°C and complaints of sore throat and general fatigue. He also had a mild cough, rhinorrhea, and low back pain but had no difficulty breathing. Although a reverse transcription polymerase chain reaction test was not performed, antigen testing of a nasopharyngeal swab for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was positive. At that time, most countries were experiencing the Omicron variant wave. Therefore, he was considered to have the Omicron variant of SARS-CoV-2 and was hospitalized.

That evening, he reported a worsening sore throat, difficulty swallowing, and a change in his voice. We performed flexible video endoscopy to rule out acute epiglottitis [1] and detected a necrotic legion localized to the supraglottic, glottic, and subglottic areas, mildly edematous arytenoids (Fig. 1), and post-nasal drip and erythema in the nasopharynx (Fig. 2).

Main symptoms caused by the Omicron variant include upper respiratory tract symptoms, particularly rhinorrhea, sneezing, and sore throat [2]. The diffuse necrotic lesion seen in the larynx in this case could be a characteristic of acute laryngitis caused by the Omicron variant.

 Declarations
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Conflict of interest

The author has no conflicts of interest to declare.

Ethical Approval

Not applicable.

Consent to participate and consent to publish

The patient consents to having the data published. All patient data were anonymized.

Availability of data and materials

You are not required to obtain permission to reuse this article.

References


Figures
Figure 1

Fiberscopic findings in the larynx.

The diffuse necrotic region was localized to the supraglottic, glottic, and subglottic areas. No acute epiglottitis was found. Yellow arrowheads show bilateral edematous arytenoids.
Figure 2

Fiberscopic findings in the nasopharynx.

Diffuse erythema and post-nasal drip were found.