

Acute supraglottitis during COVID-19 pandemic: by SARS-CoV-2 virus or not?

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Abstract

This clinical image indicates the importance of the early diagnosis and treatment of acute supraglottitis during COVID-19 pandemic.

1 CASE REPORT

A 46-years-old Japanese woman presented to our hospital with fever and dyspnea. On examination, her body temperature was 38.0°C, blood pressure 114/79 mm Hg, heart rate 130 beats/min, respiratory rate 22 breaths/min, and oxygen saturation 97% breathing ambient room air. Her laboratory findings showed white blood cells count of 9,390 cells/mm³, C-reactive protein 22.46 mg/dL. Radiographic imaging of chest showed no pneumonia. Direct laryngoscopy showed right epiglottitis with inflammation and edema of the right aryepiglottic fold and arytenoid (Figure 1). Thus, we diagnosed this case as acute supraglottitis.

2 QUESTION

What is suspected as the pathogen of acute supraglottitis during COVID-19 pandemic?

3 ANSWER

At first, we took SARS-CoV-2 virus into consideration as one of causes of acute supraglottitis during COVID-19 pandemic, as Tysome *et al.* indicated.¹ However, in this case, the laryngoscopic findings did not show the ulceration nor overlying fibrinous exudate, which was seen in viral laryngitis,^{1, 2} but show inflammation and edema, and blood test data was neutrophil predominance (85.5%), suggesting that the case was not caused by virus, but bacteria, nevertheless during COVID-19 pandemic. After the judgement by us, the patient immediately received intravenous antibiotics, and she fortunately recovered from the illness without tracheostomy.

DISCLOSURES

Nones.

INFORMED CONSENT

Informed consent has been obtained for the publication of this clinical image from the patient.

CONFLICT OF INTEREST

None declared.

AUTHORSHIP

All the authors made a substantial contribution to the preparation of this manuscript and approved the final version for submission. YB: Prepared the manuscript. YB and YK: Reviewed the manuscript and provided the clinical images.

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FIGURE 1 Direct laryngoscopy showed right epiglottitis with inflammation and edema of the right aryepiglottic fold and arytenoid

