



Endoscopic findings of laryngitis caused by SARS-CoV-2/Omicron variant infection

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A 29-year-old male visited our hospital with complaints of a fever of over 39 °C, a sore throat and difficulty swallowing, lasting 4 days. He also had a mild cough, but had no difficulty breathing; and he did not experience dysosmia, dysgeusia, rhinorrhoea, nausea, diarrhoea nor arthralgia.

The rhino-laryngo flexible video endoscopy, which was performed for excluding laryngeal edema, revealed a diffuse, erosive, and necrotic region localized to the glottic and supraglottic area, in particular to the ventricular band and posterior (laryngeal) surface of the epiglottis without laterality, though the hypopharynx, oropharynx, and oral cavity were normal (Fig. 1).

No elevation of beta-D glucan or immunoglobulin of herpesvirus is revealed, and T-SPOT was negative. RT-PCR of one nasopharyngeal swab for SARS-CoV-2 was positive for COVID-19, and confirmed the identification of the p.E484A

variant, but failed to confirm the presence of the p.L452R variant which suggested that the SARS-CoV-2 variant was Omicron [1]. He received an oral painkiller and no anti-viral drugs and no supplemental oxygen were administered. After 5 days, his symptoms resolved.

Omicron variant is more likely to infect the upper respiratory tract than the lung, and major symptoms caused by the Omicron variant consist of upper respiratory tract symptoms, such as runny nose, sneezing, and sore throat [2]. The diffuse necrotic erosive lesion in the ventricular band and posterior (laryngeal) surface of the epiglottis can be characteristic of laryngitis caused by Omicron variant. Findings of the characteristic larynx and normal pharynx are essential for clinicians, since it can act as an indicator for an undetected Omicron.

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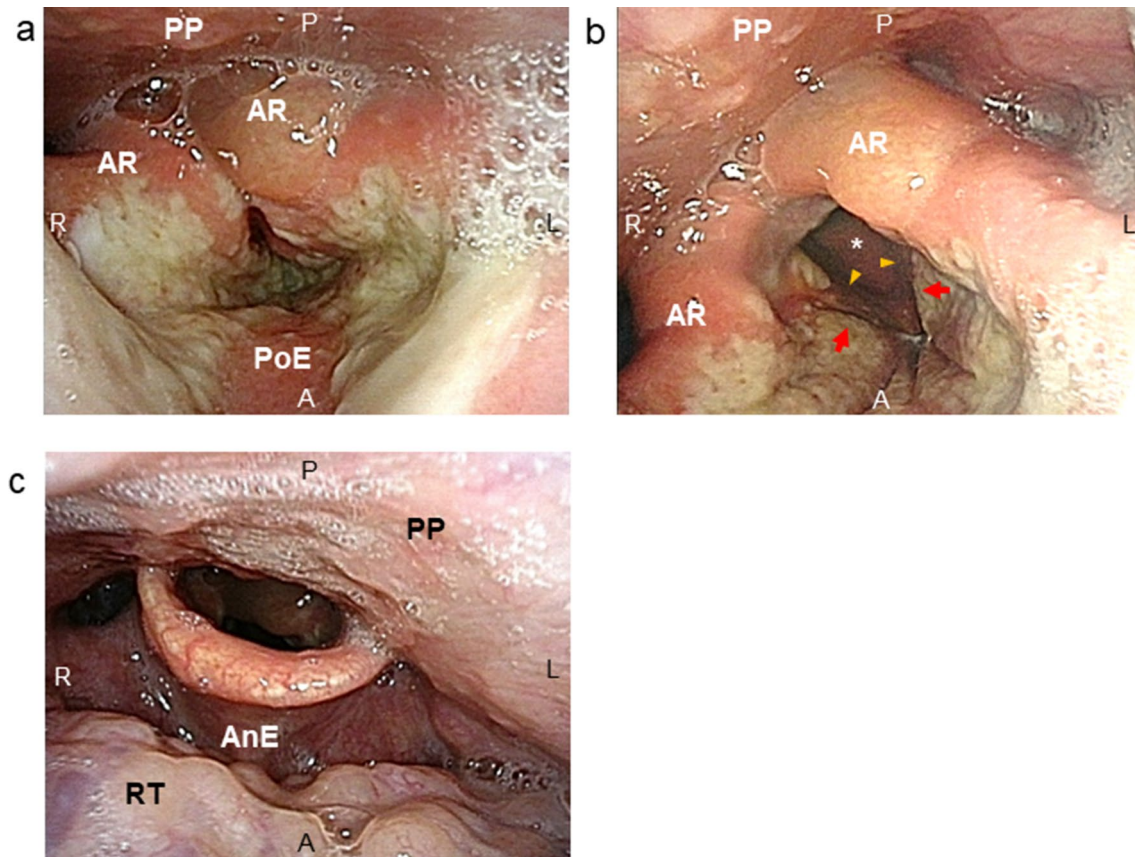


Fig. 1 Findings from rhino-laryngo flexible video endoscopy Diffuse erosive and necrotic region was localised to the glottic and supraglottic area without laterality. **a** Intralaryngeal finding when the vocal cords are closed. **b** Intralaryngeal finding when the vocal cords are open. **c** Anterior surface of epiglottis and root of tongue. *PP* pos-

terior wall of pharynx, *AR* arytenoid, *PoE* posterior (laryngeal) portion of epiglottis, asterisk, subglottis, yellow arrowheads, vocal cord, red arrows, ventricular band, *AnE* anterior portion of epiglottis, *RT* root of the tongue

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