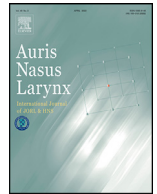




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Letter to the editor

Collaboration between generalist and ENT physicians in COVID-19 Omicron variant-induced laryngitis*Dear Editor:*

We recently read, with great interest, a case report of subglottic laryngitis induced by coronavirus disease (COVID-19) Omicron variant by Kimura *et al.* published in *Auris Nasus Larynx*, from the perspective of a general internist, engaged in hospital and emergency medicine [1]. Since the Omicron variant, especially the BA.5 variant, has become prevalent in Japan, the number of cases presenting with severe pharyngalgia appears to be increasing, as described by the authors. In our hospital, we have encountered up to three similar cases of subglottic laryngitis in the past few weeks.

Here, we present one such case. A young adult was diagnosed with COVID-19, two days before presenting to the secondary emergency designated hospital with severe pharyngalgia accompanied by dysphagia, odynophagia, and drooling. The patient was suspected of having acute epiglottitis and was immediately referred to a tertiary hospital under intravenous corticosteroid administration. Subsequently, laryngitis was diagnosed and the patient was admitted to the general medicine department with otolaryngologists' backups for observation. Inhaled adrenaline and 500 mg per day of intravenous hydrocortisone were administered for two days. The hydrocortisone was tempered after the symptoms speedily improved and was switched to 25 mg per day of oral prednisolone two days later, on discharge. The steroids were administered for a total of five days. The other two cases also had similar clinical courses.

The challenge for non-otolaryngologists is the differential diagnosis of laryngitis because of its symptomatic similarity with epiglottitis [2]. If the patient presents with dysphagia, odynophagia, or drooling, physicians should perform additional workups for airway obstructive complications as soon as possible. However, laryngoscopy, an irritant and a risk factor for airway emergencies by itself, is generally required to rule out acute epiglottitis. Additionally, laryngitis and not epiglottitis can result in airway emergencies, as reported by Kimura *et al.* [1]. The limited number of physicians and institutions that can perform fiberoptic laryngoscopy or emergency airway management, which means that most COVID-

19 patients visit general outpatient clinics without otolaryngologists. However, COVID-19 epiglottitis needs immediate airway management [3]. The patient must be referred by primary care physicians to tertiary hospitals with otolaryngologists or medical staff proficient in airway management when laryngitis, epiglottitis, or related diseases are suspected during medical interviews and examinations such like our case.

For primary care physicians who are not skilled in fiberoptic laryngoscopy, computed tomography may be an alternative, noninvasive examination to differentiate airway emergencies and detect pneumonia in COVID-19 patients [4]. However, physicians must be aware that the supine position may be a risk for asphyxia in epiglottitis patients [2]. Instead, cervical point-of-care ultrasonography is a noninvasive and convenient imaging strategy for epiglottitis once the physician is accustomed to it [5].

Regarding the treatment, systemic administration of corticosteroids appears effective in the primary care setting. The authors raise concerns regarding administering steroids to patients with COVID-19 without oxygen demand [1]. Certainly, the administration of steroids for mild COVID-19 is not recommended in the treatment guidelines for COVID-19. However, these were formulated based on the presence of pneumonia without considering laryngitis [6], and continuing steroid administration for those who need it for other reasons is advised [7]. As Kimura *et al.* pointed out, oxygen saturation may not decrease until asphyxia in airway emergencies, therefore, steroids should be prescribed for laryngitis in our opinion. The usual regimen of steroid usage for COVID-19 pneumonia is ten days of administration of dexamethasone. However, COVID-19 laryngitis does not require such lengthy treatment. As long as a patient can be carefully observed in a case of tracheal restenosis, the steroid should be tapered off as the symptom improves (usually in a matter of a few days).

Kimura *et al.* highlighted the risk of asphyxiation among COVID-19 patients with laryngitis [1]. That is, admitting the patient to the hospital would be appropriate for observation until the disease is stabilized. In general, few institutions have hospital otolaryngologists who provide inpatient care for COVID-19 patients. However, internal physicians may be more proficient in the management of COVID-19 and pneumonia, especially in patients with multimorbidity. Considering these facts, a team of general physicians and otolaryngologists

should collaborate for the inpatient management of COVID-19.

In conclusion, general physicians should also be aware of recent Omicron variants, associated with upper respiratory emergencies, and collaboration with otolaryngologists should be emphasized.

Disclosure statement

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Ethical statement

The study is in accordance with the Code of Ethics of the World Medical Association (Helsinki Declaration).

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