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Figure. The right (arrow) and left (arrowhead) vocal cords.

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A 45-year-old woman who had undergone a remote thyroidectomy presented to the emergency department with 2 hours of nontraumatic dyspnea and dry cough. She was afebrile, her respiratory rate was 34 breaths/min, and her oxygen saturation was 98%. On physical examination, the patient had inspiratory stridor and wheezing. Point-of-care ultrasound was performed to assess the patient's vocal cord movements (Figure and Video 1). Video 2 shows normal vocal cord movement.

For the diagnosis and teaching points, see page 111.
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DIAGNOSIS:

Central retinal arterial occlusion with cilioretinal artery sparing. Fundoscopy demonstrated diffuse retinal whitening but good retinal perfusion between the nerve and fovea. There was diffuse retinal arterial attenuation and segmentation. Although carotid echography did not demonstrate internal carotid artery stenosis, magnetic resonance angiography showed a focal stenosis at the right posterior cerebral artery and P2 segment, and cardiac echography demonstrated a dilated aortic root and tricuspid aortic valve with calcification and moderate regurgitation. At the 3-month follow-up, the patient's visual acuity remained 20/100, and the whitish retina resolved with a pale optic disc (Figure 2).

Retinal artery occlusions are often due to blockages of retinal blood flow from an embolus. Occasionally, there can be sparing of a cilioretinal artery, which may help maintain some central vision. Central retinal artery occlusion risk factors include hyperlipidemia, hypertension, diabetes, and cardiovascular disease, including valvular disorders.[1-3]

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DIAGNOSIS:

Bilateral vocal cord paralysis. The patient was further evaluated with fiberoptic nasopharyngoscopy, and the vocal cords were found to be paralyzed. Emergency cordotomy was recommended, and the patient was transferred to the hospital where she had undergone her prior surgery.

Inspiratory stridor suggests an obstruction of the upper respiratory tract, including vocal cord paralysis. Although vocal cord paralysis is relatively common, bilateral paralysis is rare and can be life-threatening.[1] Ultrasound is a rapid method of noninvasive assessment.[2]

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