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## Introduction

Dysphagia refers to any impairment in the swallowing process, classified into oral, pharyngeal, and esophageal phases based on lesion location. Oropharyngeal dysphagia commonly arises from neurologic, structural, or muscular dysfunctions, with stroke being the most common etiology in hospitalized patients. However, structural malignancies can mimic or complicate neurogenic dysphagia, necessitating comprehensive evaluation. We present a case of acute exacerbation of acute dysphagia caused by pyriform sinus cancer in an elderly patient with a history of cerebral infarction.

## Case Report

A 83-year-old male who had a history of right middle cerebral artery territory infarction, left parietal lobe infarction, hypertension, and atrial fibrillation visited the outpatient department of rehabilitation medicine due to progressive dysphagia over the previous three months, without new neurological symptoms. His primary complaints included choking episodes after liquid intake.

Initial evaluation included videofluoroscopic swallowing study using the Penetration-Aspiration Scale and residue grading. Study showed vallecular residue (Grade 1 in liquid, Grade 2 in solid) and pyriform sinus residue (Grade 1 in both liquid and solid). Penetration occurred with small amounts of thick liquid.

Suspecting possible stroke recurrence given his vascular risk factors, the patient was admitted for intensive dysphagia rehabilitation and neuroimaging. However, diffusion-weighted magnetic resonance imaging of brain showed chronic ischemic changes without evidence of acute or recent infarction. Subsequent computed tomography of neck revealed a 40\*29\*38 mm-sized enhancing mass involving right pyriform sinus, suggestive of pyriform sinus cancer with lymph node metastasis.

The patient was referred to the department of otorhinolaryngology for further evaluation and treatment. He received emergent tracheostomy due to impending airway obstruction and excisional biopsy, in which the pathologic results confirmed hypopharyngeal cancer. Total pharyngolaryngectomy with modified radical neck dissection with gastric pull-up was recommended, but the patient and the family opted for palliative care and remained under outpatient follow-up.



Figure 1. The computed tomography of neck reveals on enhancing mass in the right pyriform sinus area

## Conclusion

Dysphagia in elderly patients is most often attributed to neurological diseases such as stroke, dementia, or Parkinson's disease. However, this case highlights the importance of considering structural causes, such as malignancy, especially when dysphagia worsens without new neurological findings. Comprehensive evaluation, including neuroimaging and structural assessment, is essential for accurate diagnosis and appropriate management.