International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

A Case Report of Fish bone Ingestion Masquerading an Aberrant Internal Carotid Artery

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Abstract

Aberrant internal carotid artery in the parapharyngeal space are usually asymptomatic. Aberrant position classically described as tortuous , kinked or coiled depending on the deviation from the vertical place. These anatomical variation can place the ICA in close proximity to the pharyngeal wall and subsequently cause narrowing of the pharyngeal area. Although mostly asymptomatic, they may presented with symptoms such as dysphagia, cough and rarely dysphonia.

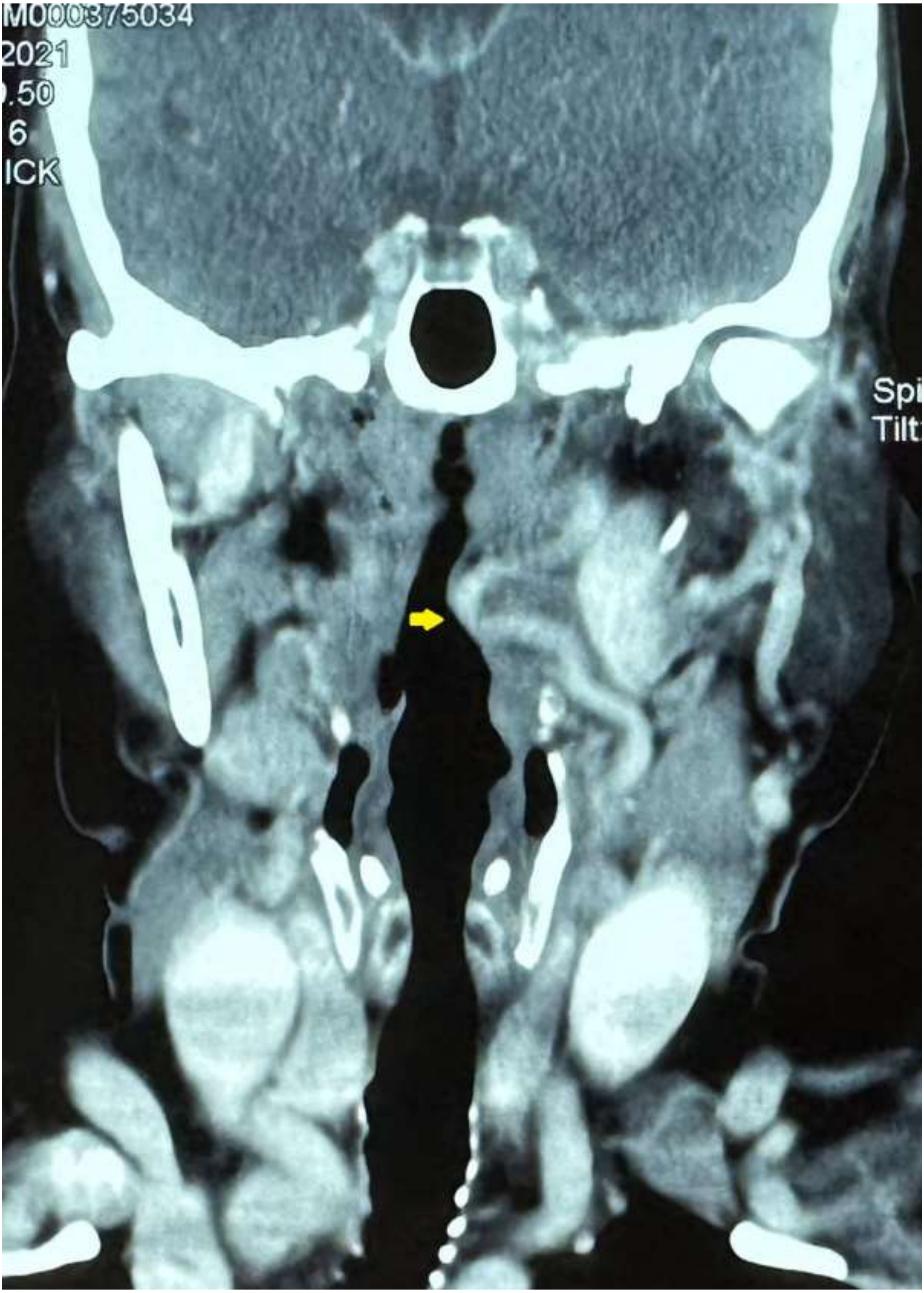
Here we present a case of 66 years old Japanese lady in East Coast of Malaysia with aberrant left ICA presented with dysphagia and a background history of alleged fish bone ingestion. Endoscopic examinations showed pulsatile mass over left posterior pharyngeal wall. Radiological examination was done to confirmed the diagnosis, Computed Tomography (CT) neck showed abnormal orientation of left ICA.

Aberrant ICA is rarely reported as it is mostly asymptomatic, but it may lead to potentially life threatening event such as iatrogenic bleeding from the aberrant ICA during procedure. Thorough examinations in diagnosing this kind of patient is necessary especially when patient came in with vague symptoms and history.

Background

Normal anatomical course of the ICA is posterolateral to the pharyngeal wall with an age-dependent distance from the tonsillar fossa approaching 2.5 cm in an adult. Parapharyngeal ICA variations have a calculated incidence in the general population between 10% to 40% and are frequently found bilaterally [1]. Parapharyngeal ICA aberrations are common but under reported anatomic variations. Identification of these anomalies is important to avoid ICA injury in future procedure such as intubation or oropharyngeal surgery. [2] Aberrant ICA also have been reposted with association with cerebrovascular insufficiency. [3][4]

Dysphagia in a case of aberrant ICA are rarely reported. Case reported presented with solely dysphagia are limited. Other contributing factors related to aging may be the cause of dysphagia secondary to fibrosis, inflammation, loss of elasticity and atherosclerosis of carotid which lead to increase the narrowing of the aerodigestive system and restrict the motility of the larynx [5]



Case report:

A 66 years old, Japanese lady was referred to ORL department in East Coast of Malaysia for foreign body sensation over left side of the throat and dysphagia for few months. She had history of alleged fish bone ingestion months prior that. Patient otherwise denies any change of voice, shortness of breath, no chest pain, no body weakness. She had medical history of hypertension, diabetes mellitus and bronchial asthma Endoscopic examination showed pulsatile bulging of left posterior pharyngeal wall, no foreign body seen. No mass on the external neck region and no bruit.

CT neck showed abnormal orientation of the left ICA, coursing medially and indenting the posterior wall of oropharynx at the level of C2. It causes mass effect and effacement of the left oropharyngeal wall as compared to right side.

This case was treated conservatively with swallowing therapies.

Discussion

A thorough diagnostic evaluation must be performed before one labels an aberrant ICA as a source of dysphagia. Furthermore in this case, patient had history of fish bone ingestion months prior presentation. Migrating fish bone should be excluded first. Contrast-enhanced CT scan is necessary to confirm the diagnosis in this case. Other diagnostic test include a four-vessel carotid and vertebral angiogram to identify the location and severity of the carotid coil. In this patient with dysphagia symptoms, upper GI swallow evaluation and endoscopy also important in excluding other cause of dysphagia.

Dysphagia in cases of aberrant ICA managed mainly conservatively. Head maneuvers , swallowing therapies and in some center transcutaneous neuromascular electrical stimulation proved to be helpful in managing symptoms. Other than conservative management, surgical resection of the redundant part of the ICA has been reported successfully improved the symptoms. [6]

Keyword: aberrant, internal carotid artery, dysphagia

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