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RESEARCH ARTICLE

ZENKER'S DIVERTICULUM: A RARE ENTITY

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Abstract

Zenker's diverticulum is a rare cause of dysphagia and is not commonly seen in clinical practice. It may present as regurgitation of food, dysphagia, nocturnal cough or bad breath. A 52-year-old man gave three months history of difficulty swallowing along with regurgitation of food after lying down, intermittently associate with sensation of food getting stuck in his throat. The symptoms were evident with solid food, and he would often regurgitate undigested food after few hours of ingestion of the same. On performing endoscopy, diverticulum was noted in upper oesophagus and endoscope repeatedly entered in it and was not able to be pushed into oesophagus beyond diverticulum, even after repeated attempts. The patient underwent Contrast enhanced computed tomography test of upper chest which revealed wide neck (diameter 13 mm) oral contrast filled pharyngeal outpouching measuring approximately 43 (cc) x 32x 28 (AP) mm seen from posterior wall of hypopharynx at C5-6 vertebral level projecting posterior left laterally- suggestive of Zenker's diverticulum. He was advised surgical consultation but he preferred to go to some higher centre for the same and has not reported after that till date.

Introduction:-

Zenker's diverticulum is a type of false diverticulum or outpouching that develops typically in cervical oesophagus at the wall between the pharynx and oesophagus and ischaracterized by dysphagia,regurgitation of undigested food, halitosis, nocturnal coughing & regurgitation and aspiration pneumonia, which is especially seen in elderlyas the most consistent symptom [1]. It occurs due to relative weakness in the wall of the pharynx and oesophagus which is called as Killian's triangle or Killian's dehiscence, resulting in an outpouching of the mucosal andsubmucosal layers [2]. It is classified by size, typically measured in the craniocaudal direction. Thethree size classifications are small (up to 2 cm), intermediate (2-4 cm), and large (greater than 4 cm) [3]. It isa relatively rare condition that predominantly affects men, with a prevalence of 0.01% to 0.11% in thegeneral population [2]. The diagnosis is usually made during the seventh to eighth decades of life andseldom before age 40 [4].The modified barium swallow, which uses contrast video fluoroscopy, is the most crucial imaging modalityfor diagnosing zenker's diverticulum [5]. Several surgical options are available for the treatment of ZD. Among these options,endoscopic diverticulectomy has been shown to be the most effective treatment due to decreased post-operative complications and mortality rates [6]. We report two cases who were diagnosed in our department on endoscopy.The Key components of a Zenker's repair is of diverticulum ("the pouch") and splitting the muscle below the diverticulum thought to be the cause. Surgical repair has traditionally been performed through a small left neck incision with

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resection of the diverticulum and division of the cricopharyngeal muscle, which contributes to the formation of the diverticulum.

Case Report- 1

A 52-year-old man with not a known case of any chronic illness gave three months history of difficultyswallowing along with regurgitation of food after lying down., intermittently associate with sensation of food getting stuck in his throat. The symptoms were evident with solid food, and he would often regurgitate undigested food after few hours of ingestion of the same. He was put on proton pump inhibitor and prokinetic agent by practitioner but for no relief. He also developedhalitosis and frequently woke in the middle of the night with a coughing fit. He was referred to our department for upper gastrointestinal endoscopy. On performing it, diverticulum was noted in upper oesophagus and endoscope repeatedly entered in it and was not able to be pushed intooesophagus beyond diverticulum, even after repeated attempts. Thus, suspicion of zenker's diverticulum was kept and patient underwent Contrast enhanced computed tomography test of upper chest which revealed wide neck (diameter 13 mm) oral contrast filled pharyngeal outpouching measuring approximately 43 (cc) x 32x 28 (AP) mm seen from posterior wall of hypopharynx at C5-6 vertebral level projecting posterior left laterally- suggestive of Zenker's diverticulum. He was advised surgical consultation but he preferred to go to some higher centre for the same and has not reported after that till date.

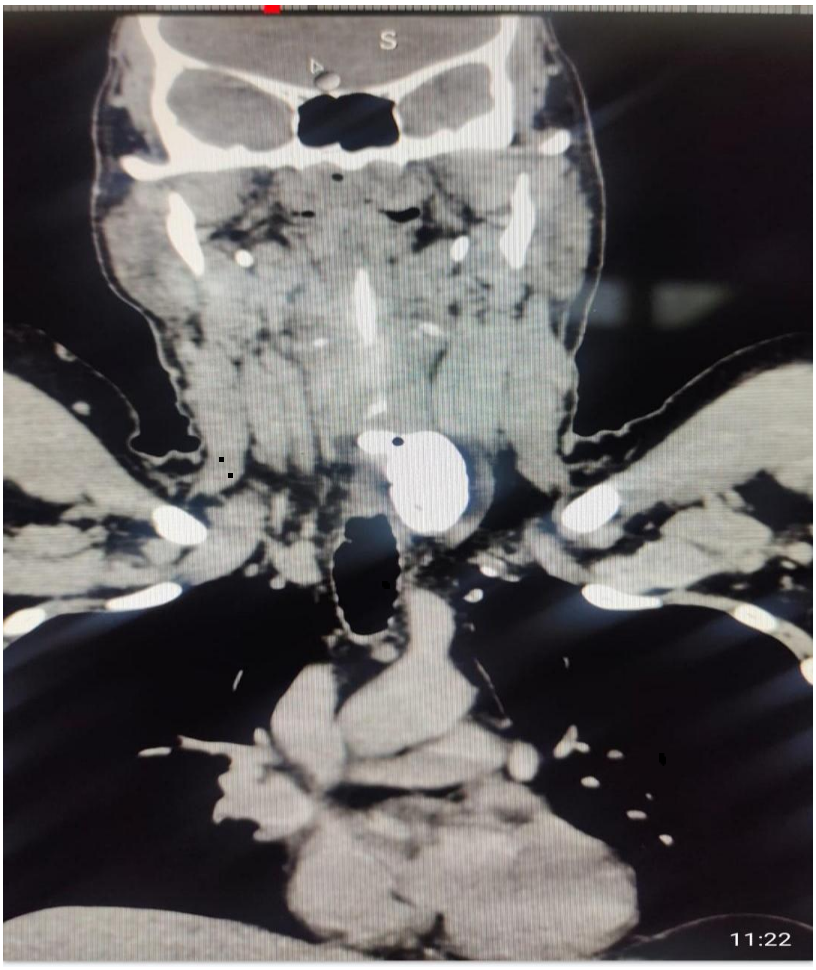

Figure 1:- CECT Scan Chest Showing Zenker's Diverticulum.

Case Report- 2

A 48-year-old man, a known hypertensive, well controlled on drugs, gave six months history of regurgitation of food after lying down, intermittently associate with sensation of food getting stuck in his throat. He would often regurgitate undigested food after few hours of ingestion of the same. He was put on proton pump inhibitor by medical specialist but without any symptomatic relief. He underwent barium swallow which revealed zenker's

diverticulumwhich was confirmed on upper gastrointestinal endoscopy. He was advised surgical consultation but he was reluctant for the same due to risk associated with surgical intervention and later on was lost to follow up.

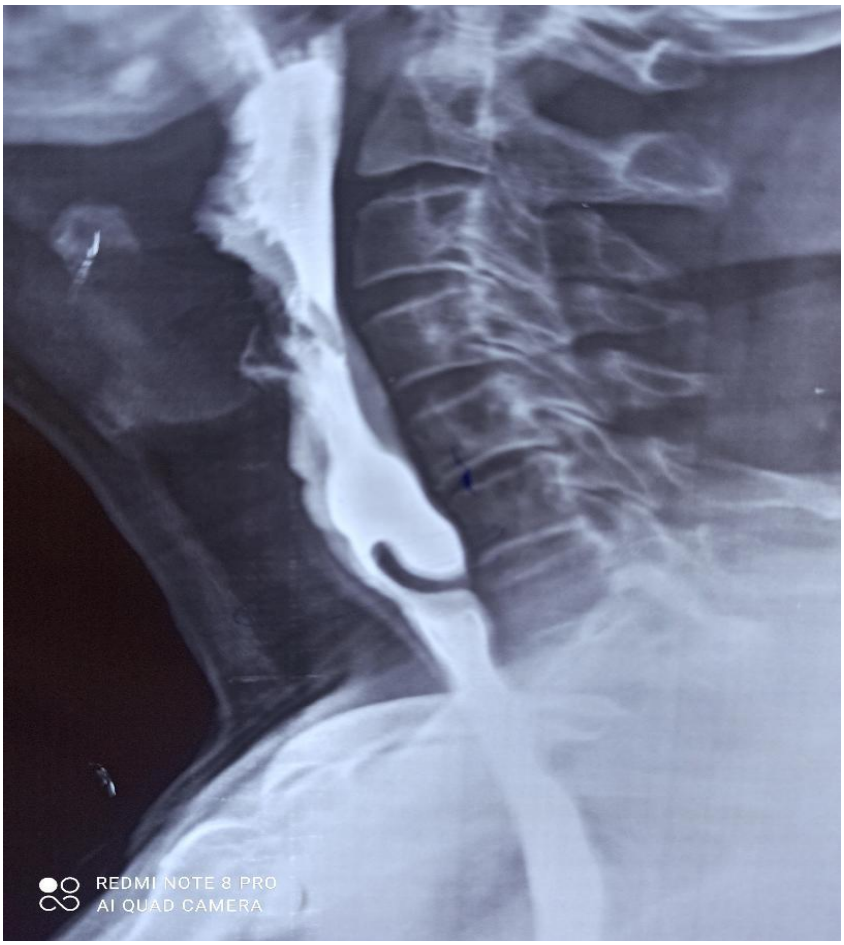

Figure 2:- Barium Swallow Showing Zenker's Diverticulum.

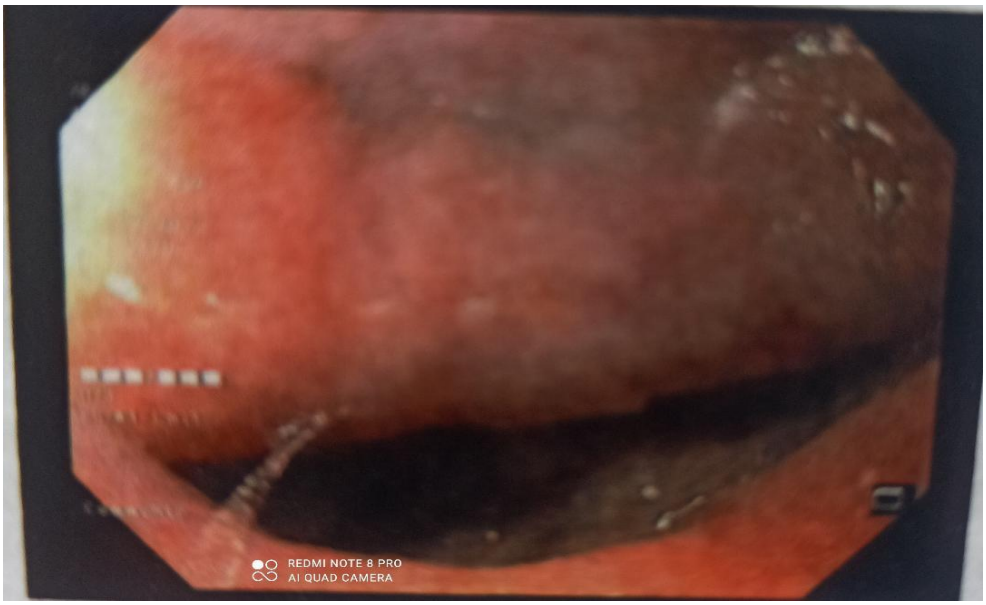

Figure 3:- Endoscopy Showing Zenker's DiverticulumIn Upper Esophagus.

References:-

1. Law R, Katzka DA, Baron TH: Zenker's diverticulum. Clin Gastroenterol Hepatol. 2014, 12:1773-82. 10.1016/j.cgh.2013.09.016
2. Watemberg S, Landau O, Avrahami R: Zenker's diverticulum: reappraisal. Am J Gastroenterol. 1996, 91:1494-8.
3. Siddiq MA, Sood S, Strachan D: Pharyngeal pouch (Zenker's diverticulum). Postgrad Med J. 2001, 77:506-11. 10.1136/pmj.77.910.506
4. Ferreira LE, Simmons DT, Baron TH: Zenker's diverticula: pathophysiology, clinical presentation, and flexible endoscopic management. Dis Oesophagus. 2008, 21:1-8. 10.1111/j.1442-2050.2007. 00795.x
5. Jaffer NM, Ng E, Au FW, Steele CM: Fluoroscopic evaluation of oropharyngeal dysphagia: anatomic, technical, and common etiologic factors. AJR Am J Roentgenol. 2015, 204:49-58. 10.2214/AJR.13.12374
6. Gross ND, Cohen JI, Andersen PE: Outpatient endoscopic Zenker diverticulectomy. Laryngoscope. 2004,114:208-11. 10.1097/00005537-200402000-00006.