world Journal of Otolaryngology

Clinical Study

A Case Study and Justification for Transcervical Diverticulectomy

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Received Date: Jan 12, 2022
Accepted Date: Jan 13, 2022
Published Date: Feb 11, 2022

Abstract

Killian-Jamieson herniation (KJD) could be a rare kind of cervical musculature herniation. It originates inferior to the cricopharyngeal muscle and lateral to the longitudinal muscle of the gorge, and is closely related to the repeated vocal organ nerve (RLN). we have a tendency to report a case of KJD associate exceedingly|in a very} 78-year-old man treated with an open diverticulectomy with a nerve integrity monitor (NIM), and gift a comprehensive literature review. Our case supports the intimate relationship of the RLN to a KJD, and thus we have a tendency to advocate open diverticulectomy with the employment of a table game because the treatment of alternative for KJD to attenuate risk of injury to the RLN.

Keywords

Killian jamieson diverticulum, Lateral cervical esophageal diverticulum, Dysphagia, Globus sensation

Introduction

Killian-Jamieson herniation (KJD) may be a rare kind of muscle system herniation with unsure pathophysiology. It originates inferior to the cricopharyngeal muscle and lateral to the longitudinal muscle of the cervical musculature [1]. This space of weakness, noted because the Killian-Jamieson house, contains penetrating branches of the repeated vocal organ nerve (RLN) [2,3]. Like Zenker's herniation (ZD), KJDs ar believed to be pulsion diverticula that ar nonheritable because of a mixture archaic connected changes on the muscle system of the musculature and swallowing pathology. The observation that KJDs ar seen nearly solely in time of life or older patients supports this claim [4]. KJD is usually symptomless [4], however will be related to symptoms just like ZD, as well as upset, cough, and regurgitation. different less common symptoms are delineated similarly, as well as foreign body defense [5] or cervical redness [6]. designation of KJD is predicated on picture taking analysis, specifically CT scan and metal esophagography. Differentiation from the a lot of common ZD is predicated on the findings of a herniation within the lateral wall of the musculature more or less a pair of cm below the higher muscle system muscle while not Associate in Nursing obstructing cricopharyngeal bar [4,7]. Treatment has historically consisted of Associate in Nursing open diverticulectomy with or while not esophagomyotomy [6,8- 11], however, there are recent reports of KJDs with success
repaired with examination strategies [7,12]. we tend to gift a case of a symptomatic KJD that demonstrates the utility of Associate in Nursing open excision and also the potential dangers of examination repair with relation to the RLN, and report the findings of a literature review.

Case Report

A 78-year-old male given to Associate in Nursing patient clinic with a history of persistent upset, globus sensation, cough throughout intake, gastro-esophageal reflux sickness (GERD) and occasional regurgitation. His physical test, as well as fibreoptic laryngoscopy, was traditional however a metal esophogram and subsequent CAT (CT) scan incontestible a right-sided muscle system herniation inferior to the cricopharyngeus and anterolateral to the musculature, in line with a Killian-Jamieson herniation (KJD) (Figure 1). The patient was then taken to the surgery for definitive open diverticulectomy given the priority for the potential intimate relationship between the repeated vocal organ nerve (RLN) and also the herniation. Following induction of anesthesia with insertion of a table game catheter (Medtronic), a Weerda diverticuloscope was introduced to examine the herniation, that was found to be distal to the cricopharyngeus muscle and protruding anterolaterally to the patient's right, therefore confirming the designation of KJD. A cervical rigid esophagoscopy was performed. The pouch was absolutely wedged with food trash (Figure 2). Following disimpaction and irrigation, Associate in Nursing orogastric tube was wont to enter the musculature and strip gauze was packed into the pouch to help in identification of the sack once the neck was opened. A right-sided horizontal neck incision was wont to expose the herniation, that measured three.5 cm long. The RLN was found to be adherent to the medial neck of the herniation (Figure 3), Associate in Nursingd was fastidiously compound away before excision of the pouch with an Endo terrorist group articulating stapling machine. A operation of the circular muscle fibers like a shot inferior to the herniation was conjointly performed. The incision was closed layers and alittle penrose drain was left in place and removed on operative day one. A follow up gastrograffin swallow study on post- operative day five incontestible Associate in Nursing intact staple line and also the patient was started on a diet. He was advanced to a diet and discharged on operative day half dozen.

Discussion

Many comparisons are created between ZD and KJD because of the actual fact they need similar symptoms, a lot of typically occur within the older, and ar believed to possess similar etiologies. Associate in Nursing association between GERD and ZD has been antecedently delineated [8], Associate in Nursingd though an association between KJD and GERD has not nevertheless been incontestible, there ar case reports relating the presence of KJDs with pyrosis [8] and erosive inflammation [13]. the topic in our case report had poorly controlled GERD, any supporting a potential association. Hypotheses for the association of ZD with GERD embody longitudinal muscular contraction resulting in separation of muscle fibers in a neighborhood of weakness [15] and inappropriate contraction of the higher muscle system muscle throughout swallowing [16]. a big range of patients ar symptomless and diverticula ar found throughout workups for probable thyroid nodules or

different neck lots (Table 1). the idea that a big range of patients with ZD ar symptomless has result in theories proposing a purposeful, and not simply structural, part of the pathology, which can even be true for KJD [4,17]. Unlike ZD, that affects males slightly quite females, KJDs rumored within the literature ar most frequently found in old ladies followed by older men. curiously, whereas KJDs ar usually larger in men they're less typically symptomatic in males when put next to their feminine counterparts (Table 1).

While the bulk of KJDs delineated within the literature ar left- sided and unilateral, alittle range of variances are delineated within the literature, as well as bilateral KJDs [4,11,19], and a couple of KJDs occurring on identical aspect [1]. Right-sided KJDs, just like the one seen in our case, ar extremely rare, and more or less 1/2 subjects within the literature with a right-sided KJD conjointly had a left sided KJD. The disproportionate range of right-sided KJDs could also be partially because of the variations in anatomy between the left and right neck. especially, the a lot of lateral location of the artery on the left could lead to a neighborhood of comparatively low resistance compared to the correct. knowledge on the anatomical relationship of the RLN to the KJD is restricted to some reports, however studies that do describe the situation, as well as this case report, note that the KJD comes posterolaterally to the RLN [6,8,31].

Killian-Jamieson herniation (KJD) may be a rare kind of muscle system herniation with unsure pathophysiology. It originates inferior to the cricopharyngeal muscle and lateral to the longitudinal muscle of the cervical musculature [1]. This space of weakness, noted because the Killian-Jamieson house, contains penetrating branches of the repeated vocal organ nerve (RLN) [2,3]. Like Zenker's herniation (ZD), KJDs ar believed to be pulsion diverticula that ar nonheritable because of a mixture archaic connected changes on the muscle system of the musculature and swallowing pathology. The observation that KJDs ar seen nearly solely in time of life or older patients supports this claim [4]. KJD is usually symptomless [4], however will be related to symptoms just like ZD, as well as upset, cough, and regurgitation. different less common symptoms are delineated similarly, as well as foreign body defense [5] or cervical redness [6]. designation of KJD is predicated on picture taking analysis, specifically CT scan and metal esophagography. Differentiation from the a lot of common ZD is predicated on the findings of a herniation within the lateral wall of the musculature more or less a pair of cm below the higher muscle system muscle while not Associate in Nursing obstructing cricopharyngeal bar [4,7]. Treatment has historically consisted of Associate in Nursing open diverticulectomy with or while not esophagomyotomy [6,8- 11], however, there are recent reports of KJDs with success

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