incidental discovery of large esophageal varices during thyroidectomy

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Introduction

Downhill" esophageal varices (DOVs) are less common than distal esophageal varices, occupying the lower and middle thirds of the esophagus, commonly referred to as 'Uphill' in the Anglo-Saxon literature and generally observed in patients with portal hypertension. This is a little-known condition, mainly described as the consequence of secondary obstruction or compression of the superior vena cava (SVC), bypassed by the azygos vein. [1].

VOD bleeding occurs rarely, accounting for 0.1% of hematemesis etiologies [2]. This occlusion may be caused by malignant or benign compressive masses (lung cancers, mediastinal and thyroid tumors or mediastinal In contrast to uphill varices, downhill varices have a retrograde blood flow and are in the proximal .adenopathy) esophagus. Downhill varices are rare and usually caused by superior vena cava obstruction due to bronchogenic carcinoma and mediastinal tumors [2.3].

Case

A 55-year-old female patient with no pathological history presented with intermittent hematemesis for 6 months, .with no other digestive signs notably no notion of jaundice, abdominal pain or liver disease

Biological workup on admission showed anemia (9.7 g/dl hemoglobin) with normal platelet count, TSH us .normal

In addition, the patient presented with an anterior cervical swelling, photo 1, for 2 years and, on cervical ultrasound, a voluminous nodular goiter with compressive nodules classified as eutirads 3.

Given the compressive nature of this goiter, the patient underwent total thyroidectomy, with an intraoperative demonstration of the monstrous esophageal varices (photo 2). The decision was made to ligate the varices close to the recurrent nerves with 3-0 vicryl suture, and to coagulate the others with bipolar forceps. Exeresis was complete (photo 3). Follow-up was straightforward, with no bleeding in the last 18 month and normal endoscopy

The workup revealed no evidence of portal hypertension. Liver function and abdominal ultrasound with Doppler were normal

Discussion

The first case of VOD was reported by Felson, (2) VOD is associated with a variety of etiologies, with malignant causes predominating. It is now well known that lung cancer, mediastinal neoplasms such as lymphoma, mediastinal metastases, intrathoracic goiter, thyroid carcinoma and thymoma are common causes of VOD (5).

Central venous catheterization and mediastinal fibrosis can also lead to this condition. Exceptionally, they may be observed in patients with systemic vasculitis's such as MB

In a study of 1051 patients with cervical and retrosternal goiter, 3% of patients developed descending varicose veins (6).

Blood from the thyroid plexus circulates in the inferior thyroid veins, heading towards the brachiocephalic vein.

In the event of obstruction of the lower thyroid veins, blood flows through the deep esophageal veins. This leads to the formation of esophageal varices (4)

In contrast to the high risk of hemorrhage from uphill varices in portal hypertension, bleeding from downhill varices is extremely rare. Although an increased variceal wall tension is the ultimate factor causing bleeding in both types of varices, several factors may underline this difference in bleeding tendency. First, in patients with uphill varices, coagulation capacity may be reduced due to concomitant liver disease with an inherently increased bleeding tendency. Second, exposure to esophagogastric reflux damages distal rather than proximal varices. Third, because distal uphill varices predominantly distend at subepithelial levels compared to the submucosal location of downhill varices in the midthoracic and proximal esophageal wall, variceal rupture is much more likely to occur near the esophagogastric junction [4]. Downhill esophageal varices are commonly

associated with superior vena cava (SVC) obstruction and are named based on their cephalad to caudal direction of blood flow. Located in the upper third or middle third of the esophagus, they represent a rare subset of acute esophageal variceal bleeding. Currently, there are no standard guidelines regarding the management of these During thyroidectomy surgery, we found monstrous esophageal varices. The decision was made to .varices (7) ligate the varices close to the recurrent nerves with 3-0 vicryl sutures and to coagulate the others with bipolar forceps

Downhill varices, although rare, can cause upper gastrointestinal bleeding and should be suspected in any patient with evidence of thyroid enlargement or having a history of thyroid surgery, even though signs of superior vena cava obstruction are absent. Management of the underlying cause, as in this case by thyroidectomy, can *efficiently lead to recovery and disappearance of the esophageal varices. (4)*

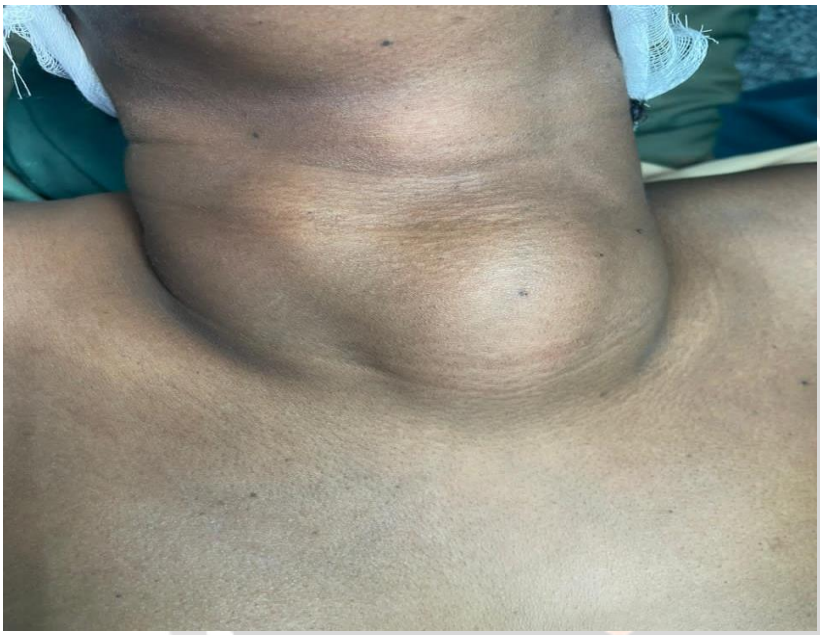

fig 1 an anterior cervical swelling

FIG 2 the monstrous esophageal varices

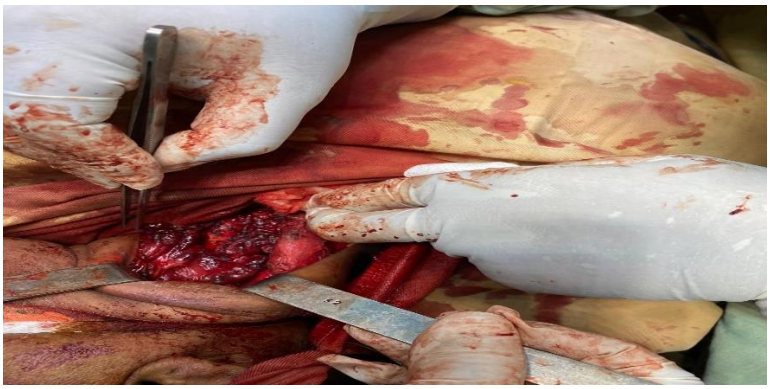

Fig 3 after ligate the varices

References

1. Behcet's disease-related superior vena cava syndrome and bleeding downhill varices. as¸ar B, Kılıc¸oglu B. Ulus Travma Acil Cerrahi Derg 2017 ; 23(2) : 170-2

2. Felson B, Lessure AP. "Downhill" varices of the esophagus. Dis Chest 1964; 46: 740-746 2

3. Savoy AD, Wolfsen HC, Paz-Fumagalli R, Raimondo M. Endoscopic therapy for bleeding proximal esophageal varices: a case report. Gastrointest Endosc 2004; 59: 310-313

4. An unusual cause of hematemesis: Goiter Astrid AM van der Veldt, Mohammed Hadithi, Marinus A Paul, Fred G van den Berg, Chris JJ Mulder, Mikael E Craanen World J Gastroenterol 2006 September 7; 12(33): 5412-5415 www.wjgnet.com World Journal of Gastroenterology ISSN 1007-9327 wjg@wjgnet.com © 2006 The WJG Press. All rights reserved

5. Varices œsophagiennes de Downhill compliquant une maladie de Bechet : une situation rare Khadija Krati1, Imane Haraki1, Soukaina El Yazal1, Soukaina Jiddi1, Fatimazahra Lairani1, Jaouad Yousfi2, Mouna Zahlane2, Lamiaa Essaadouni2 1 CHU MED VI Marrakech, Service de gastroentérologie, Avenue Ibn Sina, Marrakech, Maroc 2 CHU MED VI Marrakech, Service de médecine interne, Avenue Ibn Sina, Marrakech, Maroc

6. shmidt KJ, Lindner H, Bungartz A, Hofer VC, Diehl K. [Mechanical and functional complications in endemic struma (author's transl)]. MMW Munch Med Wochenschr 1976; 118: 7-12

7. Downhill esophageal varices: a therapeutic dilemma Raja Chandra Chakinala1 , Anila Kumar1 , Jonathan E. Barsa2 , Dhruv Mehta2 , Khwaja F. Haq1 , Shantanu Solanki1 , Virendra Tewari2 , Wilbert S. Aronow3 1 Division of General Medicine, Department of Medicine, 2 Department of Gastroenterology and Hepatobiliary Diseases, 3 Department of Cardiology, Westchester Medical Center, New York Medical College, Valhalla, NY, USA Correspondence to: Wilbert S. Aronow, MD, FACC, FAHA. Professor of Medicine and Director of Cardiology Research, Westchester Medical Center, New York Medical College, Macy Pavilion, Room 141, Valhalla, NY 10595, USA. Email: wsaronow@aol.com.]