

Title:

A rare cause of esophageal mucosal and submucosal lesions

Authors:

De-Feng Li, Zheng-Lei Xu, Jun Yao

DOI: 10.17235/reed.2020.6531/2019 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Li De-Feng, Xu Zheng-Lei, Yao Jun. A rare cause of esophageal mucosal and submucosal lesions. Rev Esp Enferm Dig 2020. doi: 10.17235/reed.2020.6531/2019.



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

CC 6531

A rare cause of esophageal mucosal and submucosal lesions

De-Feng Li, Zheng-Lei Xu and Jun Yao

Department of Gastroenterology. The 2<sup>nd</sup> Clinical Medicine College. Shenzhen

People's Hospital. Jinan University. Shenzhen, China

Correspondence: Jun Yao MD

e-mail: yj\_1108@126.com

**Keywords:** Esophageal lesions. Betel nut.

Dear Editor,

A 45-year-old male was admitted with palpitations, chest discomfort and a swallowing obstruction of one hour duration after chewing a betel nut. The

symptoms appeared within five minutes. His physical examination was unremarkable

other than tachycardia and the results of routine laboratory testing were within the

normal limits. An electrocardiogram showed sinus tachycardia (ST) and the

echocardiography was normal. The patient was given routine oxygen, intravenous

fluids and electrolyte replacement therapies. The symptoms of palpitation and chest

discomfort were relieved after 30 minutes. However, the swallowing obstruction was

not alleviated. The esophagogastroduodenoscopy showed a longitudinal hematoma

and multiple superficial ulcers located 20 cm from the incisors down to the gastric

cardia (Fig. 1A). Subsequently, an endoscopic ultrasonography (EUS) was performed,

showing that the longitudinal hematoma originated from the submucosa (Fig. 1B).

The swallowing obstruction was resolved after one week and re-examination by

esophagogastroduodenoscopy showed healing of the esophageal lesions.

Discussion

Betel nut chewing is common in many areas and is known to be harmful to humans,



especially due to the increased risk of oral carcinoma. However, few are aware of its adverse effects, particularly in acute toxicity. A systematic review reported 17 cases of adverse events associated with betel nut chewing. Most of them occurred within minutes of betel nut ingestion and all occurred within one hour, including nausea, vomiting, dizziness and palpitations, as well as severe symptoms such as coma, respiratory failure and acute myocardial infarction (1). To our knowledge, this was the first case report of betel nut exposure contributing to an acute esophageal lesion.

## **Funding support**

This work was supported by the Natural Science Foundation of Guangdong Province (No. 2018A0303100024), the Three Engineering Training Funds in Shenzhen (No. SYLY201718, SYJY201714 and SYLY201801), the Technical Research and Development Project of Shenzhen (No. JCYJ20150403101028164) and the National Natural Science Foundation of China (No. 81502040).

## References

1. Deng JF, Ger J, Tsai WJ, et al. Acute toxicities of betel nut: rare but probably overlooked events. J Toxicol Clin Toxicol 2001;39:355-60. DOI: 10.1081/CLT-100105155



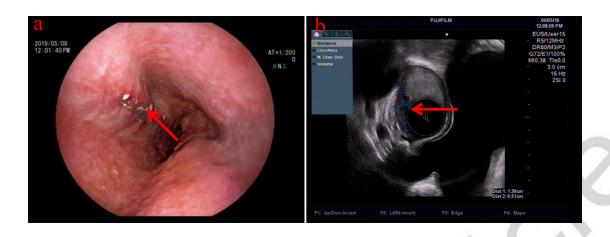


Fig. 1. A. Esophageal lesions located 20 cm from the incisors down to the gastric cardia. B. Submucosal hematoma.

