Inhaled Steroids for Misdiagnosed Asthma Increase the Frequency of Esophageal Moniliasis in Patients with Achalasia

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A55-yearold patient with dysphagia had years of aspirations and was given inhaled steroids for misdiagnosed asthma and upon endoscopic examination besides manifestations of achalasia found to have sever oesophageal moniliasis.

INTRODUCTION

Candida Albicans (esophageal moniliasis) is the most common cause of infectious esophagitis so far. However, this kind of infectious esophagitis is linked to immunocompromized conditions e.g. uncontrolled diabetes, HIV infection, patients with advanced malignancy, and with prolonged heavy steroids use. Furthermore, infrequently patients with achalasia and other obstructive lesions of the esophagus with prolonged food stasis have been diagnosed with this infection **[1,2]**. The case presented her is educational from different points. First, the clinical inertia. This patient had years of complaints and per the current practice guidelines **[3]** he should have been investigated by either imaging studies or endoscopy years back for both the persistent pain and the progressive dysphagia particularly with failure of empirical PPI therapy and persistence of complains. Second, the misdiagnosis of asthma. In patients with achalasia, like our patient, with stagnation of the food residues, recurrent aspirations with cough and sometimes wheezes are occasionally misdiagnosed as asthma. This further complicated the case because the inhaled steroids **[4]**, as those given to our case, are well known risk factors for the local fungal infection and this explains the extensive affection seen in this patient. The extensive candidiasis shown in Figure 1 B should draw attention of clinicians to the odynophagic effect of this infection among this category of patients

Case Presentation

A 55-year old male patient with hypertension on amlodipine had 4-5 years history of central chest discomfort, dysphagia, with cough and was misdiagnosed as GERD and asthma and given multiple courses of proton pump inhibitors (PPIs) and due to cough was diagnosed as asthma and kept on inhaled steroid (budesonide) in combination with a long-acting bronchodilator (formoterol fumarate dihydrate). The patient when evaluated in our clinic 2-months ago did not fulfill the diagnostic criteria of GERD and with the presence of the alaram manifestation dysphagia a

decision for upper endoscopy was taken and it revealed markedly dilated esophagus, tight lower esophageal sphincter and diffuse esophageal moniliasis (Figure 1 A) that was confirmed in the films done for the brushes and on histopathology specimens taken to rule out pseudoachalasia. The patient was then examined by barium swallow that showed dilated esophagus with smooth tapering lower end (Figure 1 B). The patient was treated for esophageal moniliasis with oral antifungals for 2 weeks, followed by pneumatic dilation by 30 mm balloon, and the inhaled steroids were discontinued.

DECLARATION

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ii. Conflicts of interest/Competing interests: None

iii. Ethics approval: Approved.

iv. Consent to participate: written informed consent taken from the patient

v. Consent for publication: written informed consent taken from the patient

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vii. Code availability: Not applicable

viii. Authors' contributions: ME diagnosed the case, performed endoscopy, wrote the article an approved it

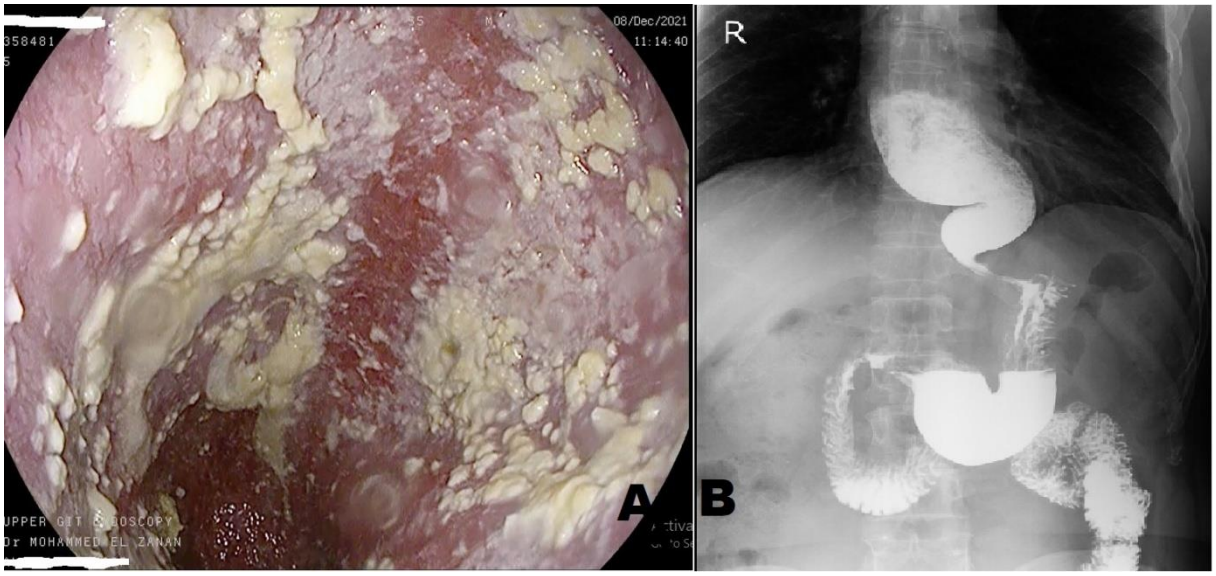

Figure 1: A; The dilated esophagus is studied with white fungal plaques and the underlying mucosa was friable and erythematous with punctate ulcers at a few sites. **B;** Barium swallow showing dilated esophagus with smooth tapering lower end (bird peak appearance)

REFERENCES

1. Kumar P, Mohan S, Verma A, Baijal SS. Candida esophagitis in achalasia cardia: Case report and review of literature. *Saudi J Gastroenterol* 2007; 13:88-90.
2. Wibowo AP, Perdana RF, Herawati S. Case report: Management of achalasia with esophageal candidiasis and bradycardia at tertiary hospital. *Eurasia J Biosci* 2000; 14: 6931-6937.
3. Hoversten P, Otaki F, Katzka DA. Course of Esophageal Candidiasis and Outcomes of Patients at a Single Center. *Clin Gastroenterol Hepatol.* 2019 Jan; 17(1):200-202.e1. doi: 10.1016/j.cgh.2018.04.035. Epub 2018 Apr 24. PMID: 29702297.
4. Oude Nijhuis RAB, Zaninotto G, Roman S, Boeckxstaens GE, Fockens P, Langendam MW, Plumb AA, Smout A, Targarona EM, Trukhmanov AS, Weusten B, Bredenoord AJ. European guidelines on achalasia: United European Gastroenterology and European Society of Neurogastroenterology and Motility recommendations. *United European Gastroenterol J.* 2020 Feb; 8(1):13-33. doi: 10.1177/2050640620903213. PMID: 32213062; PMCID: PMC7005998