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A case report of achalasia

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Abstract:
Achalasia is characterized by no peristaltic contraction of the esophagus and inadequate relaxation of the lower esophageal sphincter. Dysphagia, regurgitation, and heartburn are the most prevalent symptoms. A 41-year-old male was referred to General Hospital with a primary symptom of dysphagia that had persisted throughout adulthood. To aid swallow solid or soft food, the patient needed to drink a lot of water. In the last three months, the complaint deteriorated, followed by odynophagia, nausea, and vomiting undigested, retained food. The patient also complained of heartburn and had previously been diagnosed with a type of angina pectoris, but medicine did not help his symptoms. The patient had a history of weight loss but no anorexia, and there was no previous history of caustic ingestion. The patient smoked frequently. There were no abnormalities discovered during the physical checkup. The esophagogram revealed a dilated distal esophagus resembling a rat tail. Gastroscopy indicated esophageal dilation in the lower third. The distal esophagus was shown to be dilated on computed tomography. We arrived at the diagnosis of achalasia based on the findings of the exams. The patient was given a calcium channel blocker as well as a proton pump inhibitor. The patient improved clinically after treatment and was released. The patient was scheduled for a monthly outpatient clinic visit.
Keywords: Achalasia, odynophagia.

Introduction

Thomas Williams, an English doctor, described achalasia for the first time in 1672. Achalasia is characterized by no peristaltic contraction of the esophagus and inadequate relaxation of the lower esophageal sphincter. It is a main esophageal motility disorder with Auerbach's intermuscular plexus involvement, resulting in the absence of esophageal peristalsis and decreased LES relaxation in response to swallowing. Achalasia is an extremely rare condition with an incidence rate of 10 instances per 100,000 people and a morbidity rate of 1 per 100,000 people. Achalasia is most commonly diagnosed in people between the ages of 25 and 60. The onset is gradual, and most patients seek medical attention after experiencing symptoms for several years. Dysphagia, regurgitation, and heartburn are among the most common symptom.[1,2]

Case Report

A 41-year-old male was admitted to the hospital with a chief complaint of dysphagia, which had worsened in the last three months, followed by odynophagia, nausea, and vomiting undigested, retained food eaten by the patient. The patient also complained about heartburn and was previously diagnosed with a variant of angina pectoris, but his symptoms did not improve

with medication.

The patient's physical checkup finds no abnormalities. The blood tests were normal. An esophagogram was performed, which revealed a dilated distal esophagus with a rat tail appearance. Gastroscopy indicated an esophageal dilatation in the bottom third. The distal esophagus was shown to be dilated on computed tomography. We arrived at the diagnosis of achalasia based on the findings of the exams. The patient was using calcium channel blocker and proton pump inhibitor medication. The patient improved clinically after treatment and was released. The patient was scheduled for a monthly outpatient clinic visit.

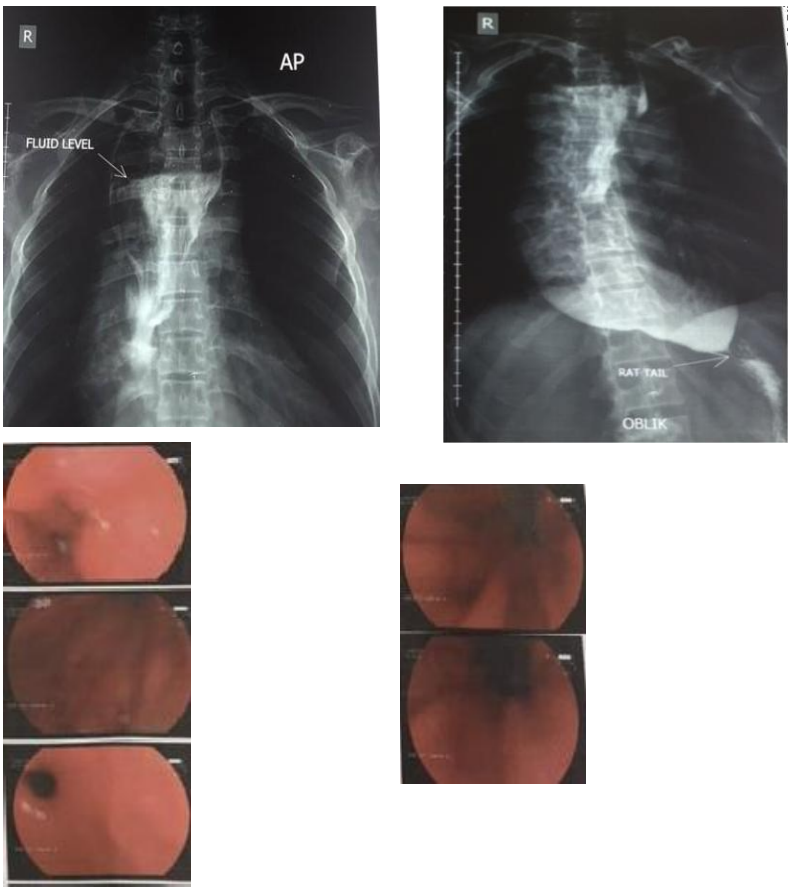

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Figure 1. a) Esophagogram:dilatation of the distal esophaguswitharattailappearance;b)Gastroscopy:dilatationonthelowerthirdof theesophagus.

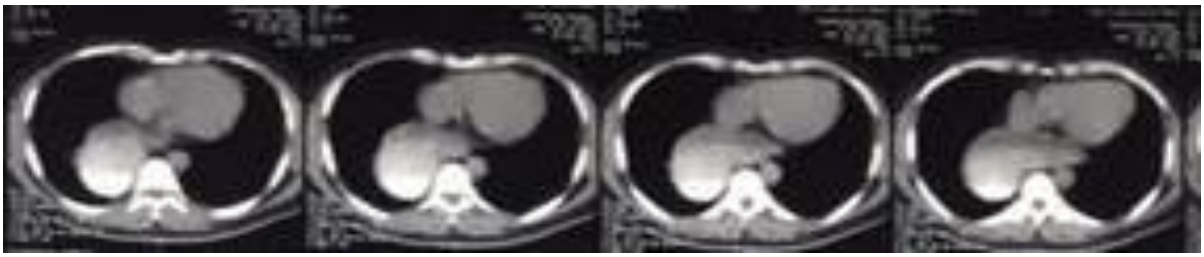

Figure2. AbdominalCT-Scan:dilatationofthedistalesophagus.

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Discussion

Excitatory (e.g., acetylcholine, substance P) and inhibitory (e.g., nitric oxide, vasoactive intestinal peptide) neurotransmitters regulate lower esophageal sphincter (LES) pressure and relaxation. Achalasia patients lack noradrenergic, noncholinergic, inhibitory ganglion cells, resulting in an imbalance in excitatory and inhibitory neurotransmission. As a result, the esophageal sphincter becomes hypertensive and non-relaxed. Although the exact etiology is uncertain, there is some indication that achalasia is an autoimmune disease. It is classified as an uncommon disease, with an incidence rate of 10 instances per 100,000 people and a morbidity rate of 1 per 100,000 people.

Achalasia is most commonly diagnosed in people between the ages of 25 and 60, with a male to female ratio of 1:1. [3,4] The patient in this example is a 48-year-old male who is an active smoker.

Dysphagia, regurgitation, difficulty swallowing foods, chest pain, heartburn, and weight loss were common symptoms. Achalasia should be detected if someone complains of progressive dysphagia for solids and liquids, as well as regurgitation of food and saliva. Physical examination was frequently ineffective. [1,2,5] The patient in this case had dysphagia since childhood, as well as trouble swallowing solid foods, heartburn, and weight loss, and physical testing indicated no abnormalities.

A barium esophagus, the single best diagnostic investigation when achalasia is suspected, should be used to establish clinical suspicion. Achalasia is distinguished by proximal esophageal dilatation and tortuosity, with smooth tapering at the lower end mimicking a sharpened wooden pencil tip look. The term "Rat Tail Appearance" refers to this appearance. Endoscopic examinations should be performed on all patients. To rule out pseudo achalasia, an endoscopic examination of the gastroesophageal junction and stomach cardia is performed. Esophageal pressure manometry confirms the diagnosis by demonstrating that pressure in the gastroesophageal junction is almost twice normal (40 mm of Hg) and relaxation after swallowing is insufficient or absent. [1,2,7,8] An esophagogram was performed in this case, which revealed a dilated distal esophagus with a rat tail look.

Gastroscopy indicated an esophageal dilatation in the bottom third. The distal esophagus was shown to be dilated on computed tomography. The patient was diagnosed with achalasia based on all of the symptoms. Endoscopic treatment consists of an intrasphincteric injection of botulinum toxin to block acetylcholine release at the level of the LES, restoring the balance of excitatory and inhibitory neurotransmitters. This treatment is of little use.Only 30% of patients treated endoscopically continue to have relief from dysphagia one year after treatment, and the majority of patients require repeated botulinum toxin injections. Pneumatic dilatation performed by a qualified gastroenterologist is the recommended treatment in those sporadic cases where surgery is not appropriate.

Conclusion

We reported a case of a 48-year-old male with achalasia. The patient was using calcium channel blocker and proton pump inhibitor medication. The patient improved clinically after being treated, discharged, and scheduled for a monthly outpatient clinic visit.

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References

1. Marco E 2016 Achalasia *Medicine: news and perspective* Available from:https://reference.medscape.com/article/169974-overview#a8
2. BaharulI,KhalilurRandSarkerK2001Achalasiacardia– casereport*TAJ***14(2)**1-3
3. GyawaliCP2016Achalasia:newperspectivesonanolddisease*Neurogastroenterol.Motil.* **28(1)** 4-11
4. Gockel I, *et al.* 2014 Common variants in the HLA-DQ region confer susceptibility to idiopathicachalasia*Nat. Genet.***46(8)**901-4
5. EvsyutinaY,*et al.*2014Familycaseofachalasiacardia*WJG***20(4)**1-5
6. FerriL E,*etal*.2010Clinicalpredictors ofachalasia*Dis.Esophagus***23(1)**76-81
7. VaeziMF,PandolfinoJE,andVelaMF2013ACGclinicalguideline:diagnosisandmanagemen tofachalasia*Am.J.Gastroenterol.***108(8)**1238-49
8. Pandolfino J E, Ghosh S K, Rice J, Clarke J O, *et al*. 2008 Classifying esophageal motility bypressuretopographycharacteristics:astudyof400patientsand75controls*Am.J. Gastroenterol.***103(1)** 27-37
9. Kroupa R, *et al.* 2010 Combined treatment of achalasia - botulinum toxin injection followed bypneumatic dilatation:long-termresults*Dis. Esophagus***23(2)**100-5
10. Pastor A C, Mills J, Marcon M A, Himidan S and Kim P C 2009 A single center 26-yearexperience with treatment of esophageal achalasia: is there an optimal method? *J. Pediatr.Surg.* 44(7)