

## A CASE REPORT ON ACHALASIA CARDIA TYPE-II

P. Keerthi\*, J. Sudharshan\*, P. Nagajyothi and G. Sai Prathyusha

Pharm. D, Department of Pharmacy Practice, Santhiram College of Pharmacy, Nandyal.

\*Corresponding Author: P. Keerthi

Pharm. D, Department of Pharmacy Practice, Santhiram College of Pharmacy, Nandyal.

Article Received on 05/02/2021

Article Revised on 25/02/2021

Article Accepted on 15/03/2021

## ABSTRACT

Achalasia cardia is characterized by incomplete relaxation of the lower esophageal sphincter and esophageal nonperistaltic contraction. The common symptoms included are heart burn, regurgitation, dysphagia, and weight loss. A female patient of age 45 years was admitted in the hospital with chief complaints of dysphagia since 4 years, abdominal discomfort, epigastric burning sensation, nausea and vomiting. The patient had to drink a lot of water to help swallow solid or soft food. Complaint worsened from last one month followed by epigastric burning sensation, nausea and vomiting. The patient had a history of weight loss but no anorexia, no prior history of corrosive ingestion. The patient was known type-2 diabetic on treatment. Physical examination revealed no abnormality. Oesophageal manometry report reveals that basal EGJ pressure normal, EGJ relaxation incomplete. The basal LES pressure is normal with incomplete relaxation on swallowing. On 5ml wet swallows normal esophageal peristaltic wave is absent with pan-esophageal pressurization in >20% of swallows median IRP is more than 15mm Hg. Based on the results of the exams, we concluded the diagnosis as Achalasia Cardia type-II. The patient was under gone for surgery (heller myotomy) treated with calcium channel blocker and proton pump inhibitor. As she is diabetic treated with H actrapid human insulin. The patient showed clinical improvement after medical procedure and was discharged. The patient was planned for twice a month follow up in the outpatient clinic.

**KEYWORDS:** Achalasiacardia, hellermyotomy, oesophageal manometry, epigastric discomfort, etc.

## INTRODUCTION

Achalasia was first described by Thomas Williams, an English doctor in 1672. Achalasia is characterized by esophageal nonperistaltic contraction and incomplete relaxation of the lower esophageal sphincter. It is a primary esophageal motility disorder with involvement of the Auerbach's intermuscular plexus, causing absence of esophageal peristalsis and impaired LES relaxation in response to swallowing. Achalasia is considered a very rare disease, its incidence rate is 10 cases per 100,000 population, and morbidity rate is 1 per 100,000 population. Achalasia is diagnosed in adults most frequently in the age group of 25 to 60 years. The onset is insidious and more often the patient seeks attention after presenting the symptoms for many years. The most common symptoms are dysphagia, regurgitation, and heartburn.

Achalasia cardia is the rare chronic neurodegenerative disorder of the esophagus which causes progressive delay in contractility of lower esophageal muscles during swallowing leading to backup of food contents and fluids in later stages within the region of esophagus. It is considered as the common leading cause of motor dysphagia. The underlying etiology include

autoimmune disorder, nervous degeneration due to loss of inhibitory ganglion in myenteric plexus of esophagus, presence of inhibitory neurotransmitters such as nitric oxide and its receptors in lower esophagus. At initial presentation drugs are prescribed as the symptoms mimic other GI disorders which often lead to delayed diagnosis. The symptoms mainly include severe pain or discomfort of chest after eating, weight loss, regurgitation of bland undigested food or saliva, severe heartburn, dysphagia, aspiration. Initial treatment includes the pharmacotherapeutic management to alleviate the symptoms and improve the esophageal outflow. Surgical treatment involves pneumatic dilatation, Heller's myotomy, preoral endoscopic myotomy, esophagectomy may be performed by open or laparoscopic procedure. It is done along with Dor's fundoplication. Case report discussed below is of a 55 years old female patient presented with dysphagia for one year. The symptoms of which worsened for 2 months along with vomiting of undigested foul-smelling food.

## CASE REPORT

A female patient of age 45 years was admitted in the hospital with chief complaints of dysphagia since 4

years, abdominal discomfort, epigastric burning sensation, nausea and vomiting. Patient had known DM.

On examination, she was febrile, but she was hemodynamically stable, no history of tingling sensation of hands and foot. Oesophageal manometry report reveals that basal EGJ pressure normal, EGJ relaxation incomplete. The basal LES pressure is normal with incomplete relaxation on swallowing. On 5ml wet swallows normal esophageal peristaltic wave is absent with pan-esophageal pressurization in >20% of swallows median IRP is more than 15mm Hg. Based on the results of the exams, we concluded the diagnosis as Achalasia Cardia type-II.

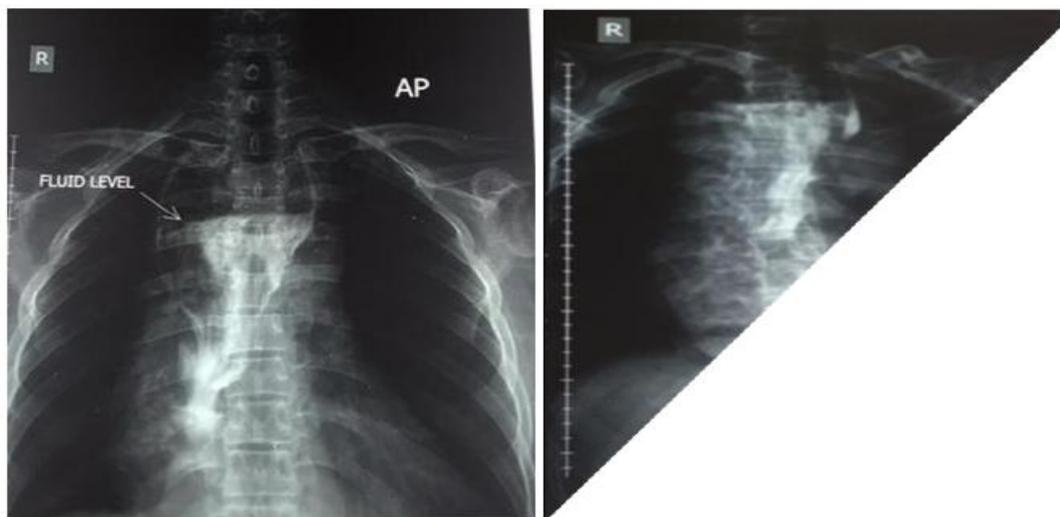
The patient was under gone for surgery (heller myotomy) treated with calcium channel blocker and proton pump inhibitor. As she is diabetic treated with H actrapid human insulin The patient showed clinical improvement after medical procedure and was discharged. The patient was planned for twice a month follow up in the outpatient clinic.

## DISCUSSION

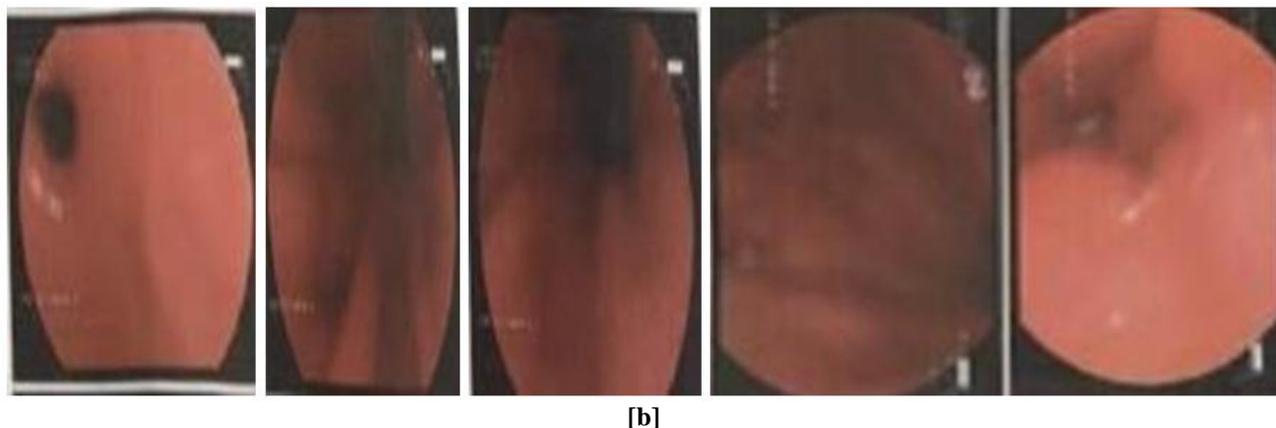
Achalasia was first described by Thomas Williams, an English doctor in 1672. Achalasia is characterized by esophageal nonperistaltic contraction and incomplete relaxation of the lower esophageal sphincter. It is a primary esophageal motility disorder with involvement of the Auerbach's intermuscular plexus, causing absence of esophageal peristalsis and impaired LES relaxation in response to swallowing. Achalasia is considered a very rare disease, its incidence rate is 10 cases per 100,000 population, and morbidity rate is 1 per 100,000 population. Achalasia is diagnosed in adults most frequently in the age group of 25 to 60 years. The onset is insidious and more often the patient seeks attention after presenting the symptoms for many years. The most common symptoms are dysphagia, regurgitation, and heartburn. Here in this case patient observed the

symptoms of of dysphagia since 4 years, abdominal discomfort, epigastric burning sensation, nausea and vomiting. Oesophageal manometry report reveals that basal EGJ pressure normal, EGJ relaxation incomplete. The basal LES pressure is normal with incomplete relaxation on swallowing. On 5ml wet swallows normal esophageal peristaltic wave is absent with pan-esophageal pressurization in >20% of swallows median IRP is more than 15mm Hg.

The therapy of achalasia aims to relieve symptoms by eliminating the outflow resistance. It is caused by the hypertensive and non relaxing LES. Once the obstruction is relieved, the food bolus can through the peristaltic body of the esophagus by gravity. Calcium channel blockers and nitrates are used to decrease LES pressure. Approximately 10% of patients benefit from this treatment. This treatment is used primarily in elderly patients who have contraindications to either pneumatic dilatation or surgery. Endoscopic treatment includes an intrasphincteric injection of botulinum toxin to block the release of acetylcholine at the level of the LES, thereby restoring the balance between excitatory and inhibitory neurotransmitters. This treatment has limited value. Only 30% of patients treated endoscopically still have relief of dysphagia 1 year after treatment. Most patients need repeated botulinum toxin injections. Pneumatic dilatation performed by a qualified gastroenterologist is the recommended treatment in those sporadic cases in which surgery is not appropriate. A laparoscopic Heller myotomy is considered by many to be the appropriate primary treatment of patients with achalasia. A Heller myotomy and a partial fundoplication performed from the chest (thoracoscopic) have a high incidence of gastroesophageal reflux. In this case, the patient was with medication, which is calcium channel blocker and proton pump inhibitor. The patient showed clinical improvement after treated and was discharged. The patient was planned for once a month follow up in the outpatient clinic.



[a]



**Figure 1. a) Esophagogram: dilatation of the distal oesophagus with a rat tail appearance b) Gastroscopy: dilatation on the lower third of the oesophagus.**

## CONCLUSION

We reported a case of age 45 years old female suffered from achalasia cardia type II. The patient was undergone for surgery (heller myotomy) and treated with medication, which is calcium channel blocker, hypoglycemic and proton pump inhibitor. The patient showed clinical improvement after treated, discharged and planned for once a month follow up in the outpatient clinic.

## REFERENCE

1. Farrukh A, DeCaestecker J, Mayberry JF. An epidemiological study of achalasia among the South Asian population of Leicester, *Dysphagia*, 2008; 23(2): 161–164.
2. Birgisson S, Richter JE. Achalasia in Iceland, an epidemiologic study. *Dig Dis Sci*, 2007; 52(8): 1855– 1860.
3. Clinical study and management of vesical calculus, March 2018 International Surgery Journal Nagaraj Malladad, Darshan A. Manjunath\*, R. Anil, Veerabhadra Radhakrishna.
4. Papatsoris AG, Varkarakis I, Dellis A, Deliveliotis C. Bladder lithiasis: from open surgery to lithotripsy. *Urol Res*. 2006; 34(3):163-7.
5. Kabra SG, Gaur SB, Sharma SS, Patni MK, Benerji P. Urolithiasis incidence of urinary calculi in South-Eastern Rajasthan- Report of 1144 cases. *Indian J Surg*, 1972; 34: 309.
6. Manyak MJ, Warner JW. Lasers in urologic surgery. In: Graham Jr SD, Keane TE, Glenn JF, eds. *Glenn's urologic surgery*.
7. Mehdiratta KS. Study on vesical calculus disease in India. In: van Reen R. *Proceeding WHO Regional symposium on vesical calculus disease*. Bangkok, 1972; 79-83.
8. Kabra SG, Gaur SB, Sharma SS, Patni MK, Benerji P. Urolithiasis incidence of urinary calculi in South-Eastern Rajasthan- Report of 1144 cases. *Indian J Surg*, 1972; 34: 309.
9. Shah RC and Jalundhwala JM. Urinary calculi in North Gujarat. *Journal of Indian Medical Association*, 1959; 32: 440.
10. Abarchi H, Hachem A, Erraji M, Belkacem R, Outarahout N, Barahioui M. Pediatric vesical lithiasis. 70 case reports. *Ann Urol*, 2003; 37(3):1179.
11. Gershaff SM, Prien EL, Chandrapanond A. Urinary stone in Thailand. *J Urol*, 1963; 90: 285.
12. Das P. A study of chemical composition of urinary calculi. *Indian J Surg*, 1971; 91-9.