Geriatrics' Achalasia

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Abstract

Lower esophageal sphincter failure, which results in dysphagia and regurgitation of food, is a hallmark of achalasia, a rare esophageal motility condition. A 74-year-old woman patient who had trouble swallowing for seven days before to admission is the subject of this case. Shortness of breath and a neck bump were not experienced by the patient. Clinical signs and imaging tests were used to make the diagnosis of achalasia. The causes, symptoms, diagnosis, and treatment strategies of achalasia in elderly people are covered in this article.

Keywords: achalasia, dysphagia, geriatrics

INTRODUCTION

Abnormal relaxation of the lower esophageal sphincter and the lack of peristaltic movement of the esophageal body are the hallmarks of achalasia, a rare primary esophageal motility condition. Patients frequently feel heartburn, chest pain, regurgitation, progressive dysphagia to solid and liquid foods, and varied degrees of malnutrition or weight loss (2)(3). The prevalence of achalasia is 27.1 instances per 100.000 and its incidence is 1.99 cases per 100.000; however, these numbers do not account for risk factors including ethnicity, gender, or age at diagnosis (4)(5). Although the exact cause of achalasia is still up for debate, it is most likely multifactorial (6).

The rare incidence of achalasia makes this case interesting to study. This report presents examinations to support the diagnosis and management of achalasia in a 74-year-old female patient.

CASE REPORT

A 74-year-old woman reportedly arrived at PKU Muhammadiyah Gombong Hospital's emergency room seven days ago with dysphagia, or trouble swallowing. As if it were lodged in her neck, the patient found it difficult to swallow and frequently regurgitated the meal without experiencing any nausea or vomiting. The patient reported difficulty swallowing, but no complaints of chest pain, neck lumps, or shortness of breath were made. The patient did perceive a decrease in her weight, nevertheless.

The patient had no notable medical history of long-term conditions, such as stomach disorders or tumors. There were no comparable conditions in the patient's family history. The patient's vital indicators were within normal ranges during physical examination. There were no tumors or swollen lymph nodes found during the neck examination (figure 1). There were no indications of respiratory distress, and lung auscultation was normal. There were no indications of dehydration upon investigation.

Figure 1. Neck examination shows no enlarged lymph nodes or masses in the neck area.

Routine blood tests revealed no evidence of leukocytosis, anemia, or thrombocytosis, and the results were within normal ranges. Leukocyte levels were 10.21 thousand/µl (3.8-10.6 thousand/µl), platelet levels were 323 thousand/µl (150-440 thousand/µl), and the patient's routine blood examination yielded the following results and normal reference values: 12 grams/dL (11.7-15.5 grams/dL). After that, an X-ray of the soft tissues of the neck (figure 2) and thorax (figure 3) was taken. The results showed that there was cardiomegaly, a homogeneous opacity image in the right paratracheal that was suspected of being a mediastinal mass, and the trachea (in the middle, not deviated) appeared to be deviated to the left but did not narrow the air column.

Figure 2. Soft tissue X-ray examination of the neck shows inhomogeneous opacity in the right paratracheal.

Figure 3. Chest X-ray examination shows the trachea slightly deviated to the left, not narrowed.

From the first day of treatment until the third day, analgesic, anti-inflammatory, and anti-emetic therapy were administered; however, no improvement was observed. Due to difficulty swallowing fluids during esophagography and the unavailability of esophageal endoscopy, the patient continued to regurgitate and was given parenteral nutrition of dextrose fluid and Ringer lactate. This allowed for additional supporting examinations to be performed in the form of a CT scan of the thorax (figure 4). According to the imaging results, there was a bird beak sign (+) and a constriction of the distal esophagus (around 2.2 cm) together with a widening of the proximal segment with a widest diameter of 5.7 cm. This suggested primary achalasia. The patient was then referred to

the department of digestive surgery for consultation. A clinical nutritionist was not present, thus the patient was treated by the internal medicine department.

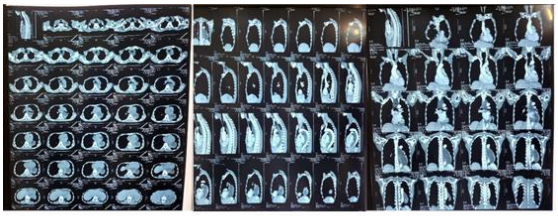

Figure 4. CT scan of the thorax shows narrowing of the distal esophagus (approximately 2.2 cm) accompanied by widening of the proximal segment with a widest diameter of 5.7 cm, suggesting primary achalasia.

DISCUSSION

The absence of lower esophageal peristaltic movement is a hallmark of achalasia, a very uncommon esophageal motility condition (7)(8)(9). In Greek, achalasia means "not relaxed" when swallowing (10). Although the exact etiology of this illness is unknown, potential causes include autoimmune, neurodegenerative, and viral infections. Weight loss, regurgitation, chest pain, heartburn, and dysphagia with solid or liquid foods are common symptoms, however they might vary from patient to patient (2).

Complementary tests such as barium esophagography, high-resolution manometry, and upper endoscopy are used to diagnose achalasia (11). Although HRM (high-resolution manometry) is the gold standard for diagnosis among the three tests, endoscopy is also crucial for ruling out other conditions including tissue, esophageal cancer, and proximal gastric cancer, which share symptoms with achalasia (12) (13). After that, this barium esophagography test is performed to measure and analyze the esophageal barium's emptying and correlate it with the patient's symptoms (14).

Treatment for achalasia is usually palliative because there is no known cure. Treatment aims to reduce dysphagia, restore gradual weight loss, and prevent further esophageal widening (10). Managing achalasia in the elderly is often more complex due to comorbidities and greater risks of invasive procedures. Achalasia patients can be managed in a variety of ways: Using an endoscope, a balloon is first inserted into the LES while sedated, and then it is expanded. Since the success rate of this procedure is 70–90% with 10% perforation, surgery is necessary if there is a perforation (2). Subsequently, surgical myotomy is one of the three final treatments for achalasia and is the appropriate first treatment for patients with surgical reasons for achalasia (2)(15); however, following myotomy, more severe GERD may develop (2). Lastly, the application of botulinum toxin for older or high-risk individuals in particular, an injection provides a safer and more effective alternative (2)(16). Although the effects of this medication, which relaxes the lower esophageal sphincter, remain for several months (17), some patients may need to have further injections because the effects wear off fast (2). Lifestyle changes and symptom monitoring may be part of long-term care.

CONCLUSION

The uncommon esophageal motility condition achalasia can produce serious symptoms, particularly regurgitation and dysphagia. Botulinum toxin A injections and other minimally invasive therapies are good ways to improve quality of life and lessen symptoms in elderly patients. The significance of early diagnosis and condition-specific therapy choices is highlighted by this example. The disciplines of Otorhinolaryngology-Head and Neck surgeon, clinical nutrition, internal medicine, digestive surgery, and radiology must all be included in the interdisciplinary management of this issue.

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