Anaesthetic Management of a Patient Diagnosed with Achalasia in the Operating Room

Ameliyathane Odasında Akalazya Tanısı Alan Hastanın Anestezi Yönetimi

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ABSTRACT

Achalasia, a primary esophageal motility disorder, is characterized by a relaxation defect of the lower esophageal sphincter. The diagnosis of achalasia is sometimes difficult and undiagnosed patients may be challenging in anaesthesia management. Here we describe the anaesthetic management of a patient who was newly diagnosed with achalasia in the operating room. A diagnosis of achalasia should be kept in mind in cases of regurgitation of undigested food contents during the induction of general anaesthesia.

Keywords: General anaesthesia, achalasia, Airway

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ÖZET

Birincil özofagus motilite bozukluğu olan akalazya, alt özefagus sfinkterinin gevşeme kusuru ile karakterizedir. Akalazya tanısının konulması zordur ve tanı konmamış hastaların anestezi yönetiminde komplikasyonlar gelişebilir. Olgu sunumumuzda daha önceden akalazya tanısı olmayan hastanın ameliyathane masasında tanı alması ve anestezi yönetimi anlatılmaktadır. Genel anestezi indüksiyonu sırasında sindirilmemiş gıda içeriklerinin gözlenmesi gibi beklenmeyen durumlarda akalazya tanısı da akıllara gelmelidir.

Anahtar Sözcükler: Genel anestezi, Akalazya, Havayolu

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INTRODUCTION

Idiopathic achalasia is a primary oesophageal motility disorder of unknown aetiology characterized manometrically by esophagealaperistalsis and insufficient relaxation of the lower esophageal sphincter (1). The annual incidence of achalasia is 1 in 100.000, and the prevalence of the disorder is 10 in 100.000 (2). Achalasia is-related symptoms can occur at any age, but it is usually diagnosed between the ages of 30 and 60 years(3). Although the aetiology is unknown, previous research showed that it may be linked to infectious, genetic or autoimmune causes (1). The primary presenting symptom is dysphagia and regurgitation. However, patients sometimes also experience chest pain or heartburn, making this the distinction between achalasia and gastroesophageal reflux difficult (4). We describe the anaesthetic management of a patient who was newly diagnosed with achalasia in the operating room.

CASE REPORT

The patient was a 36-year-old 160 cm tall, 80 kg female who was scheduled for tubal re-anasthamosis. The pre-anaesthetic evaluation and the patient history were normal. In our hospital, patients are routinely questioned about the fasting period twice: once when the patient is taken to the premedication room and again when the patient is taken to the operating room. In the present case, in accordance with our hospital's practice, the patient was asked about the fasting duration. Although the patient had been asked to fast for 6 hours, she stated that she had not eaten anything for 14 hours because of nausea.

The patient was routinely monitored, and 0.9% saline was given via venous access. The patient's heart rate was 70 pulse/minute, her blood pressure was 115/60 mmHg, and peripheral oxygen saturation was 99%. For general anaesthesia induction, 2 mg/kg propofol, 1 mcg/kg fentanyl and 0.6 mg/kg rocuronium were administered intravenously. Ventilation was started with 80% oxygen, but it was increased to 100% as it proved difficult. When food regurgitation was observed during ventilation, the ventilation was immediately stopped. The patient was placed in the trendelenburg position and rapidly aspirated and then intubated. We noticed that the stomach contents were not digested. After intubation, the patient's lungs were examined by bronchoscopy, which showed that the patient had not aspirated any particulate matter. Anaesthesia was continued with inhalation aesthetics. Surgery was completed uneventfully. Extubation and postoperative recovery were also uneventful.

The patient was re-interviewed in the recovery room and stated that she had not eaten anything for 14 hours. As the gastric contents had not discharged within 14 hours, following consultation with gastroenterologists, barium esophagography was planned. The esophagography revealed that the patient had achalasia (Fig. 1).

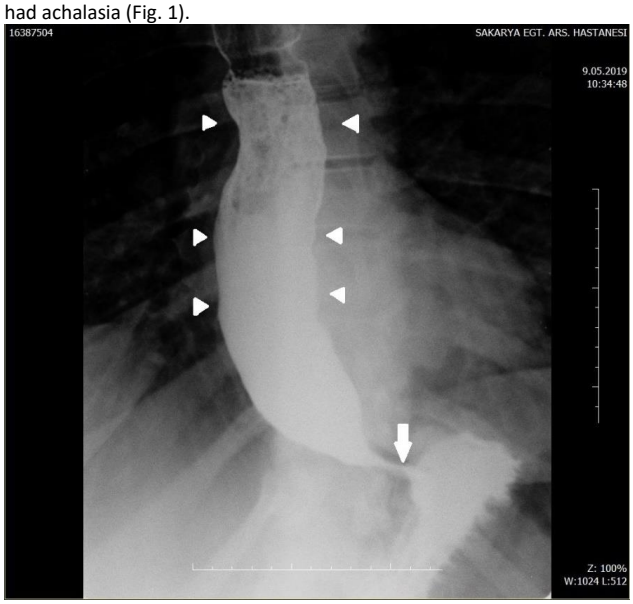

Figure 1. Barium esophagography. The arrow shows insufficient relaxation of the lower esophageal sphincter.

DISCUSSION

Achalasia, a primary oesophageal motility disorder, is characterized by a relaxation defect of the lower esophageal sphincter. The diagnosis of achalasia is difficult because the symptoms, which include regurgitation and heartburn, are similar to those of gastroesophageal reflux disease. Thus, some patients with achalasia are incorrectly treated with proton pump inhibitors or histamine channel blockers(3).Our patient had experienced occasional regurgitation complaints for many years, and these had been relieved by proton pump inhibitors. However, the patient had not undergone further investigations such as esophagealmanometry or barium esophagography previously.

In achalasia, the lower oesophageal sphincter remains persistently contracted, and the oesophagus is dilated. As a result, large volumes of food and saliva can accumulate in the dilated oesophagus(1). Therefore, the risk of aspiration is high in patients with achalasia. In the present case, although the patient had fasted for a long time, the food had not passed from the oesophagus to the stomach. With the induction of general anaesthesia, the patient was placed in a horizontal position. As a result, the upper airway reflexes could not function. Thus, when ventilation was performed, the risk of aspiration increased.

Undiagnosed disorders and diseases may be challenging in anaesthesia management. A diagnosis of achalasia should be kept in mind in cases of regurgitation of undigested food contents after ventilation.

Conflict of interest

No conflict of interest was declared by the authors.

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