A rare case presentation of psychogenic dysphagia in 7 year old boy: A case report

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ABSTRACT

Background: The incidence of dysphagia due to psychogenic dysphagia is quite common in adults, but the incidence at 5 – 14 year old age is rare. The incidence is 1.3 per 100.000 cases of dysphagia. The main problem of dysphagia is the inability to intake, which leads to dehydrearion and malnutrition. Various diagnostic tests should be performed to rule out the anatomical and neurogenic causes before a psychogenic dysphagia diagnosis is established. This case report describes a rare case of dysphagia due to psychogenic dysphagia in children.

Case Report: We report a case of a 7-year-old boy with difficulty swallowing since 12 days before admission, which worsened in the last 5 days. The patient was suspected of achalasia and was referred to an otolaryngologist at Prof. Ngoerah Hospital. Laboratory tests were within normal limits. Head CT scan showed no abnormality. The patient consulted a psychologist and was diagnosed with observation of dysphagia due to psychogenic dysphagia. After diagnosis, psychogenic dysphagia was confirmed and treated; the complaint was relieved.

Conclusion: Psychogenic dysphagia should be kept in mind as a differential diagnosis, especially in children presented with difficulty swallowing and normal diagnostic imaging.

Keywords: dysphagia, psychogenic, pediatric, psychiatrist.


INTRODUCTION

Swallowing is a natural yet complex process taken for granted daily. When structural anatomy or neurophysiology are affected, this process becomes dysfunctional. Dysphagia is a feeling of abnormal food transit upon swallowing. It typically occurs secondary to abnormal anatomy or physiology and is classified as oropharyngeal or esophageal dysphagia based on origin.¹,²

Diagnosis of dysphagia relies on a detailed history, which can often delineate oropharyngeal or esophageal dysphagia as well as anatomic from motor causes. For instance, neurologic symptoms often are clues to oropharyngeal dysphagia since it originates mainly from the central nervous system and neuromuscular disorders. In addition, dysphagia to solids and liquids typically reflects an esophageal motility disorder, whereas progressive dysphagia to solids reflects a structural disorder. Various diagnostic testing is subsequently available to confirm the cause.²,³ Video fluoroscopy, transnasal endoscopy, manometry and fiberoptic endoscopic evaluation of swallowing are used to diagnose oropharyngeal dysphagia²,³.

Real-Time Magnetic Resonance Imaging (MRI) is a newer modality that may provide a more comprehensive evaluation of swallowing and better illustrate where oropharyngeal dysfunction occurs.²,⁴ Esophagastroduodenoscopy (EGD) and barium swallow are traditionally used in the initial diagnosis of esophageal dysphagia, evaluating mainly for structural lesions. In addition, barium swallow, esophageal intraluminal impedance testing, and radionuclide transit studies provide information about esophageal transit and limited data regarding motility.¹,² Esophageal manometry has been the gold standard for evaluating motility disorders. The recent development of high-resolution manometry has offered the potential for greater diagnostic yield.²

Psychogenic swallowing disorders, whether associated or not associated with eating disorders, are an interdisciplinary phenomenon. Rarely do these patients go directly to a psychiatrist. While a gastroenterologist might be the first physician to meet a patient with an eating disorder, an ENT specialist frequently meets patients with psychogenic swallowing disorders.³ Psychogenic dysphagia is a sensation of abnormal bolus transit through the esophageal body in the absence of structural, mucosal, or motility disorders to explain symptoms, a form of somatization disorder.²,³ The incidence of Psychogenic dysphagia predominantly occurred in young adults to middle-aged adults, with 10.2 per 100.000 encountered cases of dysphagia. In contrast, incidence in children is quite rare, with 1.3 cases per 100.000 encountered cases of dysphagia.⁴

The objective of this case report was to describe a rare case of dysphagia as the manifestation of Psychogenic dysphagia in 7-year-old boy.
CASE REPORT

A 7-year-old patient with a chief complaint of difficulty swallowing came to the hospital. Difficulty in swallowing occurred 12 days before admission and worsened 5 days before admission. The parents said their children did not want to swallow food because they were afraid to vomit at first. Several days later, he was found unable to swallow. The patient also found slight drooling, which worsened during hospitalization but later improved. The patient had already lost six kilograms 2 months before being admitted. The patient also complained of nausea and epigastric pain before being admitted. No vomiting or diarrhea occurred before admission.

From the history of medication, the patient was undergoing treatment from a pediatric gastrohepatologist and psychiatrist with the complaint of inability to consume food and drink since 2 months earlier. From family history, his mother suffered from achalasia, and his parents were worried if their child had suffered from the same condition; therefore patient was referred to the hospital at the otolaryngology emergency department with achalasia suspicion. The patient was planned for an esophagoscopy and consulted the Pediatric Gastro-Hepatology division due to gastritis.

The patient’s physical examination was alert, heart rate and respiratory rate were within normal limits. The patient’s head and face examination were normal; the sclera was unicteric, and the conjunctiva was not pale. The ear, nose, and throat examinations were normal and double-checked by the otolaryngologist. There was no lymph node enlargement found on the neck. The chest was symmetrical on rest and movement; breath sounds were bronchovesicular without rales or wheezing; the first and second heart sounds were normal, and there was no murmur in auscultation. The abdomen was not distended, pain occurred when the epigastric area was slightly pushed, liver and spleen were not palpable. The superior and inferior extremities’ power, tonus, and reflex were normal.

ER laboratory results showed normal peripheral blood count, liver and renal function test within normal limits, and a normal coagulation profile. The patient later took some radiology imaging tests. The cervicothoracic imaging showed no radioopaque corpus alienum, compression, fracture, or listhesis (Figure 1). Abdominal imaging showed no ileus nor pneumoperitoneum (Figure 2). The patient then planned to take esophagography imaging to evaluate the stricture or narrowing of the esophagus. Considering the patient’s inability to swallow and the suspected intracranial process, the esophagography procedure was postponed, and a head CT scan with contrast was performed. Head CT scan with and without contrast imaging showed no infarct, intracranial hemorrhage, or Space Occupying Lesion (SOL) intracerebral or intracerebellar (Figure 3). The esophagoscope procedure was later performed to confirm anatomical anomaly in this patient with flexible laryngoscopy performed before Esophagoscopy. Flexible laryngoscopy showed normal vocal chord, arytenoid, epiglottis and no saliva precipitate (Figure 4a). The esophagography procedure showed no corpus alienum, stricture, mass or inflammation along the esophagus. The esophagoscope entered the esophagus without resistance (Figure 4b and 4c).

The patient was later consulted a psychiatrist due to normal findings from physical examination and diagnostic imaging. The psychiatrist found the episode of stress, which turns to depression from history taking. The depression was assessed using the Beck Depression Inventory (BDI) and Child Depression Inventory (CDI), with clinical depression and suspicion of depression as the result. This depression accumulation later manifested in physical symptoms, which later worsened due to the accumulation of stress. The psychiatrist later diagnosed the patient with observation of dysphagia due to psychogenic dysphagia according to the physical examination and diagnostic imaging.

Figure 1. Cervicothoracic imaging: no radioopaque corpus alienum and no compression nor fracture and listhesis.

Figure 2. Abdominal imaging: no ileus nor pneumoperitoneum.
to ROME IV criteria. Initial management was omeprazole, formula milk intake through the feeding tube, aripiprazole and non-pharmacologic therapy (family psychoeducation and supportive psychotherapy).

The patient was discharged on the 12th day of hospitalization since the clinical condition and oral intake improved. The patient never been hospitalized since then and came to the psychiatric outpatient clinic.

**DISCUSSION**

Dysphagia is one of the most common conditions that bring children to a doctor or hospital; however, dysphagia due to psychogenic dysphagia in children is a rare condition, with 1.3 per 100,000 cases of dysphagia.\(^6\) One report suggested that persistent psychogenic dysphagia accounts for approximately 4% of referrals to otolaryngologists with a peak age of onset of 35–54 years and a lifetime prevalence of 22%\(^6,7\). Psychiatrists have reported that conversion disorder is not common in children, especially under 10 years old. Psychogenic dysphagia is a symptom of conversion disorder, but psychogenic dysphagia is very rare in childhood.\(^7\) Our case, a seven-year-old boy, came with a chief complaint of difficulty swallowing. At the beginning, the patient said he was unable to swallow solid food, but later, the symptoms got worse when the patient said he was unable to drink. After the patient's consulted the psychiatrist, episodes of depression were found, which accumulated and triggered physical manifestation.

The precise nature of psychogenic dysphagia and its etiology remains unclear. There is no uniform policy for the management of this condition. However, several articles stated that the phenomenon is often associated with stress and anxiety, possibly due to acute stress' effect on upper esophageal sphincter hyperresponsiveness.\(^3\) Symptoms of psychogenic dysphagia include aphonia, the sensation of a lump in the throat, difficulty swallowing, the sensation of choking, dyspnea, or suffocation.\(^3,9\) The pain has also been described. The symptoms must be positively identified as psychologically related to some underlying mental conflict or need. Patients cannot easily discuss whether a conflict exists because they would not likely have developed the physical symptoms if they could.\(^7\) Therefore, active investigation of possible stressors may reveal the unknown anxiety issue. This is a specific form of conversion disorder. Etiologically, these persons may have physiologic vulnerability or a “familiarity” with uncomfortable sensations that do not better account for the development of psychogenic dysphagia symptoms in light of known internal conflict.\(^5,6\)

In support of a biological contribution, some studies show a relationship of up to 70% between abnormal esophageal acid exposure or distal esophageal immobility and the subsequent development of psychogenic dysphagia.\(^4,5\) In our case, the patient's came to the hospital with a chief complaint of inability to swallow 12 days before admission worsened during hospitalization before receiving psychiatric treatment (pharmacological and non-pharmacological treatments). The patient also got supportive treatment during hospitalization. The symptoms were improved, and patient was discharged in good condition.

Several examinations should be performed before the diagnosis patient with psychogenic dysphagia been made, especially radiology imaging such as cervical imaging, head CT scan, surface EMG oesophageal, modified barium swallow, and esophageal manometry as gold standard to measure muscle motility when dysphagia due to muscle motility was suspected.\(^4,6\) The radio imaging diagnostic goal is to exclude anatomical anomaly or SOL at brain parenchyma. Laboratory examination may performed when the patient is in a dehydration state due to inability to consume food and water; however, no laboratory examination could not establish the diagnosis of psychogenic dysphagia.\(^7,8\) In our case, the laboratory findings when the patient was first admitted to ENT emergency triage showed normal results. Radiology Imaging performed showed a normal chest x-ray and normal head CT scan. The patient planned to undergo oesophagography but canceled due to the inability patients to swallow contrast. An esophagoscopy procedure was performed to confirm anatomical anomaly in
CONCLUSION

We reported a case of 7-year-old boy with difficulty swallowing 12 days before admission, which worsened in the last 5 days. The patient was suspected of achalasia and was referred to otolaryngology at Prof Ngoerah Hospital. Laboratory examination within normal limits. Cervical imaging and Head CT scan showed no anatomical abnormality. The patient consulted a psychiatrist and was diagnosed with observation of dysphagia due to Psychogenic dysphagia. The patient received supportive therapy and total parenteral nutrition during the hospitalization period. After diagnosis, psychogenic dysphagia was confirmed and treated, the symptoms improved, and the patient was discharged after 12 days of hospitalization.

DISCLOSURE

Conflict of Interest

All authors stated that there is no conflict of interest regarding the publication of this case report.

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None.

Author Contribution

All.

Ethical Consideration

Department of Pediatric, Faculty of Medicine, Universitas Udayana has proven this case report. Also, according to the COPE organization, this publication has been permitted to publish the patient data by the patient’s parents through informed consent.

REFERENCES


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