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Batara, R., Ardani, I. G. A. I., Wardani, I. A. K., Windiani, I. G. A. T., Adnyana, I. G. A. N. S., & Setiawati, Y. (2022). Psychogenic dysphagia in children, and the success of family-based treatment: Case report. *International Journal of Health & Medical Sciences*, 5(1), 163-168. <https://doi.org/10.21744/ijhms.v5n1.1894>

Psychogenic dysphagia in children, and the success of family-based treatment: Case report

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Abstract---*There is a close relationship between a person's mental health and gastrointestinal disorders. Psychogenic dysphagia is a rare condition related to swallowing disorders with no structural cause or organic diseases such as neurological deficits or other physical disorders. The mechanism of this swallowing disorder is still not well understood. Based on various studies that have been conducted, the condition of psychogenic dysphagia has comorbidity with psychological disorders such as anxiety disorders, depression, and post-traumatic stress. In this case report, we will present a case of a 7-year-old male patient who had difficulty swallowing due to fear of vomiting with disturbed psychosocial conditions, and no organic disorders were found after the examination. The BDI examination showed a score of 18, which is within the border of clinical depression. So that the patient was diagnosed with psychogenic dysphagia which was included in the category of Avoidant/Restrictive Food Intake Disorder in DSM 5. Holistic and multidisciplinary treatment was needed in this case. It was also reported that the success of medical treatment to reduce the patient's vomiting symptoms from pediatrics and psychologist department, combined with supportive psychotherapy and family-based treatment increases the patient's recovery rate.*

Keywords---*children, family-based treatment, psychogenic dysphagia, psychologist department, swallowing problem*

Introduction

Gastrointestinal disorder is one of the most common problems for patients to come to the clinic or hospital. Almost all people of various ages have experienced gastrointestinal disorders in their lives (Sperber et al., 202; Avramidou et al., 2018). Along with the development of knowledge, it has been found that there is a close relationship between a person's mental health and gastrointestinal disorders (Cantarero-Prieto & Moreno-Mencia, 2022; Lee et al., 2020). Psychogenic dysphagia is a swallowing disorder with no structural causes or organic diseases, such as neurological deficits or physical abnormalities (Massa et al., 2021). It can occur acutely or chronically accompanied by feelings of discomfort or fear of swallowing food or drink. Psychogenic dysphagia can be a traumatic thing for the patient which results in a decrease in the patient's quality of life (Person & Keefer, 2021; Baijens et al., 2013). Common symptoms that appear in patients with psychogenic dysphagia are difficulty in swallowing or avoidance of swallowing accompanied by fear of choking, difficulty breathing, or nausea and vomiting (Suntrup et al., 2014). Patients with psychogenic dysphagia are thought to have intrapsychic conflicts that manifest in somatic symptoms, and also have psychiatric symptoms such as anxiety or depression. There is also an opinion that difficulty swallowing is a manifestation of a conversion disorder (Shaker et al., 2013; Verdonshot et al., 2019). In several studies discussing the problem of dysphagia, approximately 45-70% of people with dysphagia syndrome have a comorbidity of anxiety disorders, which are accompanied by psychosocial conditions such as divorce, unemployment, post-traumatic stress, and others (Shaker et al., 2013). Psychogenic dysphagia is a rare condition and the mechanism of this condition is still not clearly understood. There are only a few literatures that related to psychogenic dysphagia, so further discussion about psychogenic dysphagia is very interesting to be explored (Vanderhoof & Langnas, 1997; Mishna et al., 2009).

Method

This paper is a case report about psychogenic dysphagia with one patient as the subject. We have done informed consent to the patient's parents, where the information obtained from the patient and patient's parents will be published as a case report. The patient's parents have approved this case report (Katzman et al., 2013; Le Grange et al., 2008).

Case

A 7 years old male patient, Hindu, Balinese, currently in grade 1 elementary school. The patient was referred by the Pediatrics Department and escorted by the patient's parents on October 13, 2021, with complaints of difficulty swallowing food and drink because of fear of vomiting. This condition has been felt in the last 5 days ago and has worsened for 1 day before being admitted to the hospital. During the interview, he is cooperative, seemed calm, and able to state his name, age, current school level, and with whom he went to the hospital. The patient said that he did not want to swallow food and drink because he feels afraid that he would be vomited. When the parent going to be given food, he only chews it but does not swallow it. Then, we asked him to swallow it while drinking water, but he still did not want to swallow it. The patient said that he complained of nausea when he was asked to eat and drink. He also said that his mouth felt dry which make his mouth continue to salivate. Previously, the patient had complaints of nausea, vomiting, flatulence, diarrhea, and fever in July 2021. After that, he was taken to a pediatrician, and the complaints had improved but he still often felt nauseous. Since the school was conducted online, the patient was included in additional tutoring at home, and since then the patient was often spitting and feeling nauseated more frequently. Since he complained of nausea, his health and appetite have continued to decline, resulting in a drastic weight loss of up to 6 kg within 2 months (the patient's initial weight was 31 kilograms, during the examination the patient's weight was 25 kilograms, and the height was 140 cm) (Thottam et al., 2015; Benbadis, 2005).

The patient's parents said that 2 months before the patient complained of nausea and vomiting, he often felt bored and was ignored by his father because his father never had time to play with him. He often told his father to stop being a trader because he felt that his father was too busy and could not accompany him. The patient's father began to have limited time with his son because he had to take care of the patient's grandmother. Especially with the COVID-19 condition, many playgrounds and public places are closed so the patient's father restricts him from leaving the house. The patient was said to have been a cheerful person before he got sick, liked to play, and made many friends when he was in kindergarten. However, when he went to elementary school in early 2020, an online school was implemented that makes him not have friends to play with and hang out with, and also patients were

included in additional tutoring. The patient's mother also limits the patient's activities with their neighbors. The patient has no problems in his study because he is always on time and tries by himself in doing the tasks from his school. The patient is also said to be a quite intelligent child, likes to do math lessons, and always does it on time (Öst et al., 2012; Kingston & Prior, 1995).

The patient was born normally without any complications, immediately cried at birth, during pregnancy routinely checked by a midwife, and was said to be in normal condition. During pregnancy, the patient's mother did not experience health problems, and regularly consumed sea fish, and the patient is also often given sea fish until now. Breastfeeding is given until the age of 6 months and fully immunized. It was concluded that the patient had no previous growth and development disorders. On physical examination, the physical status was in normal condition, the nutritional status was good and the general status was within the normal condition. Examination of psychiatric status found normal appearance, playing games on mobile phones, sufficient verbal and visual contact, clear consciousness, intelligence according to education level, emotional dysphoric, adequate. Thought process: logical realistic/coherent/preoccupation with refusal to swallow. Absence of hallucinations and illusions, calm psychomotor. Cheerful, dependent personality traits. Somatization ego defense mechanism. The results of a complete blood count, biochemical blood test, head MSCT examination, chest x-ray, BOF photo, and cervicothoracic x-ray were within normal limits. The BDI score is 18 (clinical borderline depression) and the CDI score is 28 (suspected of depression) (Logemann, 2007; Maden et al., 2022).

Discussions

Psychogenic dysphagia is a rare condition related to swallowing disorders without organic disorders, the mechanism of this condition is still not well understood. According to DSM 5, the diagnostic criteria and diagnostic guidelines for Psychogenic Dysphagia that included in the category of Avoidant/Restrictive Food Intake Disorder (Sivri et al., 2018; American Psychiatric Association, 1994). This patient showed symptoms of psychogenic dysphagia disorders such as symptoms of difficulty in swallowing, accompanied by avoidance of swallowing with fear of nausea and vomiting. This feeling of nausea began to be felt since the patient felt neglected by his father, coupled with online schools and the patient was included in additional tutoring. Since this happened, the patient's complaints of nausea have been getting worse, and have experienced complaints of not wanting to swallow food and drinks at all which have been getting worse since 1 day before being admitted to the hospital. Investigations with a BDI score of 18 (clinical borderline depression) and a CDI score of 28 (suspected of depression) indicate that the patient's current psychosocial condition results in a tendency towards depression. It is suspected that the condition of the patient is currently caused by psychological factors (Toledano-Toledano & Contreras-Valdez, 2018; Vandhana, 2022).

Furthermore, based on the physical and supporting examinations, it was found within the normal condition, so this patient didn't have an organic disorder that was a trigger factor for the patient's symptoms. This was in accordance with the diagnostic criteria based on DSM 5 (American Psychiatric Association, 1994). The patient experienced a weight loss condition of 6 kg within 2 months. This weight loss is not caused by a lack of available food, because the patient's family has a sufficient economy and is able to provide appropriate nutritional needs for the patient. In addition, the patient's weight loss was not caused by the presence of anorexia nervosa or bulimia nervosa conditions. Based on the results of the history, physical examination, and supporting examinations on the patient, the patient was diagnosed with Psychological and Behavioral Factors related to Psychogenic Dysphagia in DSM 5 (American Psychiatric Association, 1994). The multiaxial diagnosis in this patient is as follows:

- a) Axis I: Avoidant/Restrictive Food Intake Disorder (F50.8) (Psychogenic Dysphagia)
- b) Axis II: Dependent; MPE: somatization
- c) Axis III: Observation of suspected gastroparesis dysphagia, suspected hypoglossal nerve lesion
- d) Axis IV: Problem with the primary support group
- e) Axis V: GAF on examination 60-51

Multidisciplinary treatment is needed in dealing with cases of psychogenic dysphagia (Bülow, 2017; Premalatha et al., 2015). However, the emphasis on handling cases of psychogenic dysphagia lies in a psychological interventions such as pharmacological and non-pharmacological. Pharmacological therapy such as anti-anxiety has been reported to be effective in some cases. Non-pharmacological therapy can be in the form of supportive psychotherapy, cognitive behavioral therapy, and family-based treatment. It is also reported that hypnosis therapy has a positive impact on people with psychogenic dysphagia (Shaker et al., 2013; Begotka et al., 2021). Family-based treatment is one of the therapeutic modalities for various psychological and clinical conditions. Family-based treatment was first coined by Gregory Betson who argued that special interactions within the family can trigger certain psychological

conditions and mental disorders. Then, this theory was developed by Salvador Minuchin by outlining interaction patterns and inappropriate family structures that can lead to certain psychological conditions [18]. In the treatment of mental disorders in order for optimal patient recovery, the patient's family must be involved. Based on a randomized clinical trial study in children with swallowing disorders conducted by Lock et al. in 2019, it was found that pediatric patients who were given family-based treatment showed a better and faster recovery rate compared to patients without family-based treatment. In this case, it was found that there were problems in the family that the patient complained about, such as the patient who felt less cared for by the patient's father. So that a therapeutic approach to the family-based is needed in the management of patients (Lock et al., 2019).

The therapy that is given to this patient is non-medical therapy and medical therapy from both the psychiatry and pediatrics department. The non-medical therapy is supportive psychotherapy to patients in the form of ventilation and reassurance as well as teaching an appropriate coping mechanism. Then family-based treatment and psychoeducation were also given to parents about the disorders experienced, the causes of the disorder, the therapy given, and the prognosis so that the family can help in supporting the improvement of the patient's health (Benfield et al., 2019; Kim et al., 2022). Medical therapy from the psychiatry department is Aripiprazole 1.5 milligram tablets every 24 hours intraorally (night). The therapy given by the pediatrics division includes ondansetron 4 milligrams intravenously every 24 hours, omeprazole 20 milligrams intravenously every 24 hours, and erythromycin 52 milligrams every 8 hours orally. Patients are also given fluid and nutritional therapy like D5 NS 5 ml per hour, as well as snacks such as bananas and chocolate pudding for the patient's nutritional needs when the patient was hospitalized in the Sanglah Hospital. After undergoing treatment for approximately 2 weeks, the patient returned to the psychiatric polyclinic on November 1, 2021, to see the progress of therapy. The patient's general condition has improved, and the patient is willing to eat and drink well. The patient's weight increased by 3 kilograms. The feelings of anxiety and fear of vomiting experienced by the patient previously had disappeared. The patient also attended school face-to-face and met with the patient's friends. It is said that the patient does not experience problems while attending school and enjoys face-to-face school conditions. The patient's family has also taken the time to deal with the health problems of the patient and support the therapy process so that the healing process of the patient's condition is faster and optimally achieved (Rivas et al., 2021; Dzaky et al., 2021).

Conclusion

Psychogenic dysphagia is a rare condition related to swallowing disorders in the absence of organic disorders such as neurological deficits or other physical disorders. A 7-year-old male patient had difficulty swallowing due to fear of vomiting. Based on the anamnesis, it was found that there were psychosocial disorders experienced by the patient, and the physical and supporting examinations were found to be in normal condition. The BDI examination showed a score of 18, which is within the limits of clinical depression. So that the patient was diagnosed with psychogenic dysphagia which was included in the category of Avoidant/Restrictive Food Intake Disorder in DSM 5. Holistic and multidisciplinary treatment was needed in this case. Medical treatment to reduce the patient's vomiting symptoms, as well as non-medical treatment such as supportive psychotherapy and family-based treatment, showed great results in the management of this case.

Acknowledgments

The authors declare no conflict of interest.

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