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Dysphagia Management and Nursing

Zarządzanie dysfagią a opieka pielęgniarska

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Abstract

Swallowing is a complex sensorimotor action. The normal swallowing action consists of three stages. A disorder in any phase of swallowing is defined as dysphagia. Dysphagia leads to physiological, psychological and social problems in individuals and negatively affects the quality of life. There are many causes of dysphagia. Poorly managed dysphagia may lead to aspiration pneumonia, malnutrition and unwanted weight loss. Physiological complications lead to repeated hospitalizations, prolonged hospitalization and mortality. Accordingly, this study aimed to review the techniques used in the management of dysphagia and the responsibilities of the nurse. Google Scholar, PubMed and ScienceDirect databases were searched with the keywords: "dysphagia", "nurse", "management" based on the dates 2015–2024. In the management of dysphagia, many methods can be applied simultaneously, including postural adjustment, compensatory maneuvers, sensory stimulation method and dietary modifications. The applied methods have some advantages and disadvantages. There are points and recommendations to be considered during the nutrition of individuals with dysphagia. At this point, the nurse should evaluate the patient in detail and plan for individualized care and evaluate the results of the implementation. Nurses have important roles in early diagnosis, treatment, follow-up and prevention of complications of treatment, follow-up and prevention of complications of dysphagia. There is a relationship between the implementation of evidence-based interventions while providing care to individuals with dysphagia and positive health outcomes of individuals. **(JNNN 2024;13(4):164–167)**
Key Words: dysphagia, management, nursing

Streszczenie

Połykanie jest złożoną czynnością czuciowo-ruchową. Prawidłowe połykanie składa się z trzech etapów. Zaburzenie któregokolwiek z etapów połykania definiuje się jako dysfagię. Dysfagia prowadzi do problemów fizjologicznych, psychologicznych i społecznych oraz negatywnie wpływa na jakość życia. Istnieje wiele przyczyn dysfagii. Źle leczona dysfagia może prowadzić do zachłystowego zapalenia płuc, niedożywienia i niepożądanej utraty masy ciała. Powikłania fizjologiczne prowadzą do wielokrotnych hospitalizacji lub przedłużonej hospitalizacji, a także śmiertelności. Niniejsze badanie miało na celu przegląd technik stosowanych w leczeniu dysfagii i obowiązków pielęgniarki. Przeszukano bazy danych Google Scholar, PubMed i ScienceDirect z zastosowaniem kluczowych słów: „dysfagia", „pielęgniarka", „zarządzanie" w oparciu o przedział lat 2015–2024. W leczeniu dysfagii można stosować jednocześnie wiele metod, w tym korektę postawy, manewry kompensacyjne, metodę stymulacji sensorycznej i modyfikacje diety. Stosowane metody mają pewne zalety i wady. Istnieją punkty i zalecenia, które należy wziąć pod uwagę podczas żywienia osób z dysfagią. Zadaniem pielęgniarki jest szczegółowa ocena pacjenta i planowanie zindywidualizowanej opieki oraz ocena wyników jej wdrożenia. Pielęgniarki odgrywają ważną rolę we wczesnym diagnozowaniu, leczeniu, obserwacji i zapobieganiu powikłaniom leczenia. Istnieje związek między wdrażaniem interwencji opartych na dowodach naukowych podczas świadczenia opieki osobom z dysfagią a pozytywnymi wynikami zdrowotnymi tych osób. **(PNN 2024;13(4):164–167)**
Słowa kluczowe: dysfagia, zarządzanie, pielęgniarstwo

Introduction

Swallowing is a complex sensorimotor event involving intentional and unintentional actions. The oral cavity, pharynx, esophagus, respiratory muscles and other structures must work in coordination to swallow food safely [1,2]. A healthy swallow consists of three phases: oral, pharyngeal and esophageal. The oral phase is the passing of nutrients into the pharynx by grinding and bolusing. The pharyngeal phase is when the vocal cords and cartilage structures close to protect the airways. The esophageal phase is the phase in which the bolus is delivered to the stomach [2].

Dysphagia is the impairment of bolus flow in any or all phases of swallowing [3]. Dysphagia, also defined as swallowing disorder or impaired swallowing ability, negatively affects the quality of life of the individual with the physiological, psychological and social problems it causes [2]. Dysphagia is a medical condition that affects dietary safety, efficiency and quality [4]. Dysphagia, which can be seen in every period from infancy to old age, is seen between 2 — 40% in the general population [2,4].

Dysphagia may develop due to many causes such as cerebral causes, neurodegenerative diseases, neuromuscular diseases, spinal cord injury, brain injury, post-extubation and age [2,5,6]. Individuals with dysphagia may experience difficulty in placing and controlling food in the mouth during feeding, coughing, voice change and the feeling of food getting stuck in the throat [7].

A comprehensive evaluation of swallowing function is required for effective management of dysphagia [2]. In the diagnosis of dysphagia, bedside clinical evaluations such as detailed medical history, physical examination and swallowing test are performed. In addition, objective methods such as videofluoroscopic swallowing assessment and electromyography are also used to diagnose dysphagia [1,2]. Poorly managed dysphagia leads to aspiration pneumonia, dehydration, malnutrition and weight loss. In addition to physical complications, dysphagia can lead to psychological problems such as anxiety and depression [3,8]. Early diagnosis of dysphagia is critical to prevent future complications [3].

Dysphagia may lead to prolonged hospitalization and even death with the complications it may cause. Therefore, swallowing evaluations and dysphagia management are of great importance [2,6]. Management of dysphagia with pharmacologic agents, surgical interventions and rehabilitation, ensuring safe and adequate food intake of the individual [2]. The management of dysphagia includes diet modifications, swallowing techniques, sensory stimulation techniques, postural adjustment, swallowing exercises and botulinum toxin injection [1,2,9]. Although these interventions can be performed independently, they are often performed together [10].

Material and Methods

Accordingly, this study aimed to review the techniques used in the management of dysphagia and the responsibilities of the nurse. Google Scholar, PubMed and ScienceDirect databases were searched with the keywords “dysphagia, nurse, management” based on the dates 2015–2024.

Management of Dysphagia

Dietary Modifications

Dietary modification includes ensuring that the patient is fed the amount and texture of food that the patient can tolerate [1]. Liquids and foods are modified at various levels of texture to ensure swallowing safety. The administration of thickened foods and thickened liquids were methods used in many countries to manage dysphagia [11]. The term thickened liquids refers to altering the texture of drinks such as water and milk, while the term thickened foods refers to foods such as mash and mashed potatoes in solid or soft solid form [4]. In individuals with dysphagia, feeding hard and complex textured foods may result in death [11].

Thickened liquids flow more slowly, resulting in a slower swallowing action. Changing the texture of food reduces chewing difficulties and fatigue. This increases the safety of swallowing and prevents aspiration [4]. There are also some concerns about the negative effects of dietary modification. The intake of thickened fluids may reduce fluid intake, leading to low hydration. Foods with increased viscosity may affect drug absorption and reduce bioavailability [12].

Caregiver and patient compliance with dietary modifications may also be low. Patients’ dislike of the taste of modified foods or caregivers’ prejudice that these foods will taste bad affect adherence [12]. There are inconsistencies in the use of modified nutrients in clinical practice. Lack of standardization in the application of these nutrients is among the main reasons for the inconsistency [10].

Compensatory Maneuvers

Compensatory maneuvers or positional swallowing techniques include positions that can be given to the patient during feeding and the development of the muscles involved in swallowing [1]. Maneuvers enable the individual to manage feeding in the current situation and help prevent aspiration [10].

Supraglottic swallowing maneuver and Mendelson maneuver are compensatory maneuvers. In the

supraglottic swallowing maneuver, the patient chews food, takes a deep breath and swallows while holding their breath, then coughs. The aim is to prevent aspiration rather than facilitate swallowing [1]. The Mendelson maneuver is to provide laryngeal elevation and changes in bolus transit time by holding the saliva in the mouth and swallowing it [2].

Sensory Stimulation Techniques

The aim of sensory stimulation techniques is to stimulate the swallowing muscles and stimulate the swallowing center. Thermal tactile stimulation and electrical stimulation are sensory stimulation techniques [1].

Thermal tactile stimulation is a treatment method used to facilitate and improve the swallowing reflex in individuals with dysphagia [13]. Thermal tactile stimulation is a noninvasive, nonpharmacologic nursing practice recommended in dysphagia care. The procedure consists of touching a metal apparatus soaked in –1°C and 3°C water to the anterior fauceal pillar regions [1].

Electrical stimulation facilitates swallowing by neuromuscular stimulation of the swallowing muscles and movement of the larynx [1]. In the treatment, electric current is applied transcutaneously to the submandibular region to stimulate the muscles and fibers. Stimulation helps to protect the airway and activate motor function during swallowing [14].

Nursing Care

The primary goal of dysphagia management is prevention of aspiration and individualized management of swallowing difficulties rather than rehabilitation of dysphagia [10]. Living conditions, choices, coping mechanisms and comorbidities of the individual should be taken into consideration in dysphagia management [2]. Managing dysphagia with evidence-based guideline recommendations in this process is related to favorable patient outcomes [8]. Nurses play an important role in the management of dysphagia, evaluation, prevention and management of dysphagia complications. The fact that nurses are the professional group that communicates with the patient the most, especially during nutrition and while administering medication, carries nurses to a key point in this process [2]. Nurses' knowledge about dysphagia is of great importance considering their duties in the team [15].

The first nursing intervention is early diagnosis of dysphagia. Nurses should be involved in early identification, treatment and rehabilitation programs for dysphagia. Likewise, they should follow up individuals in terms of complications of the interventions applied [1,3]. While taking the medical history of the individual in the diagnosis of dysphagia; the reason for admission, main complaints, current health status, problems experienced during swallowing and dysphagia symptoms should be evaluated [16].

In individuals with dysphagia, if not contraindicated, rich nutrient content and high-calorie foods will reduce the risk of malnutrition. Individuals can be offered thick soups, vegetable purees and soft foods such as bananas and peaches. In individuals at risk of malnutrition, oral nutrition is primarily maintained, while parenteral/enteral nutrition can be supported by joint decisions. It should be ensured that necessary nutritional supplements are taken, and if it is thought that they are not sufficient, recommendations about supplements can be given [1].

Appropriate body and head positioning is of great importance for safe swallowing. The head of individuals fed in the sitting position should be upright, while the head of the bed should be raised 60 degrees in patients fed in the lying position. In individuals with unilateral weakness, food should be placed on the unaffected side of the mouth. During feeding, care should be taken to ensure that the individual does not accumulate food in their mouth, feeds themselves as much as possible and does not talk during feeding. The individual should be monitored for signs of aspiration during feeding [2].

Poor oral care is related to an increased risk of pneumonia in individuals with dysphagia [10]. After feeding, the individual with dysphagia should be checked whether there is any food left in the mouth and oral care should be given. If possible, the individual should sit in an upright position for 30–45 minutes after feeding [16]. In swallowing assessment, a nasogastric tube or gastrostomy tube should be inserted depending on the severity of dysphagia [7].

In conclusion, early diagnosis of dysphagia, monitoring, prevention of possible complications and evidence-based nursing interventions are important in the management of dysphagia [8].

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