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ROLE OF DENTAL HYGIENIST IN PATIENT WITH FEEDING AND EATING DISORDER

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Abstract

In the dental office, it is not uncommon to interact with patients who suffer from disorders that interfere with treatment or alter the way treatment is provided. Disabilities can be physical, mental, and emotional. This paper will discuss the etiology, treatment, and maintenance of individuals who suffer from feeding and eating disorders. Feeding disorders are characterized by difficulty consuming food. These complications can be related to functional restrictions or simply preference. Feeding disorders are primarily found in young children, often children with underlying physiological conditions. Eating disorders, similarly to feeding disorders, are distinguished by disturbances in food consumption, whether it be over-eating, under-eating, or not eating at all. Both disorders interfere with the normal function of the oral cavity. Dental hygienists play a crucial role in the recognition and treatment of feeding and eating disorders. Recommendations including patient communication, self-care aids, and the dental hygiene care plan will be discussed.

KeyWords: Dental, Hygienist, Patient, Feeding & Eating Disorder.

Introduction

From surface level, feeding and eating disorders have indications of being the same. The two disorders, however, are their own distinct disorders that share one common denominator: food. The term feeding disorder describes a difficulty with ingesting food. Feeding disorders can be physical, mental, or both. Physical limitation include trouble with mastication or swallowing food, and mental limitations are primarily preference based and involve an aversion to a certain food or texture. An eating disorder is a psychiatric illness that causes an individual to become obsessed with body image, food consumption, and weight. Both disorders are equally severe and require several methods of treatment to manage.

The Difference Between Feeding and Eating Disorders

As stated above, the two terms are not synonymous, although it is possible that an individual may suffer from both disorders. According to Benjasuwantep, Chaithirayanon, Eiamudomkan (2013), "The Diagnostic and Statistical Manual of Mental Disorders describes feeding disorders of infancy or early childhood as a persistent feeding disturbance and either a failure to gain weight or a significant loss of weight for at least one month without significant medical conditions or lack of available food." A feeding disorder is more likely to be a physical

disability than an eating disorder. Feeding disorders have been connected to conditions such as reflux, swallowing disorders, and esophageal achalasia ("What are feeding disorders?"). Differing variables associated with feeding disorders make them much more difficult to distinguish than eating disorders. Eating disorders involve a disturbance in eating habits; however, it is typically due to an underlying psychological or self-esteem issue. Eating disorders, unlike feeding disorders, may involve an overindulgence in food, rather than a deficit.

Onset of Disorder

Feeding disorders are typically identified in early childhood years. Children with developmental disorders account for up to 80 percent of all feeding disorders (Kleinert, 2017). Developmental and genetic syndromes, like DiGeorge syndrome and Down syndrome, have been linked to a higher rate of feeding disorders ("What are feeding disorders"). Conditions like gastroesophageal reflux disease, oral motor dysfunction, esophagitis, and palatal defects are also risk factors for developing a feeding disorder ("Feeding Disorders"). Other contributing factors include autism, heart conditions, and even premature birth. Feeding disorders can also occur in healthy children who develop an aversion to eating. Although feeding disorders are often seen in children, dysphagia can also develop as a result of dementia (Flynn, Smith, Walsh, & Walshe, 2018). Contrary to feeding disorders, eating disorders are most commonly seen in young females during early-to-mid adolescence. Eating disorders can be brought on by bullying, psychological abuse, or sexual abuse. The condition has also been linked to environmental, genetic, and social factors, as well as sensory disabilities. The disorder is often brought on by the urge to be in control.

Types of Feeding and Eating Disorders

Diagnosing feeding disorders is much more complex than distinguishing an eating disorder. Most feeding disorders are functional restrictions related to mastication or swallowing. The condition is mostly related to preference based on texture, taste, or a particular food group. Another feeding disorder is termed pica, which involves the consumption of non-food items that contain no nutritional value. Elements ingested include dirt, rocks, or paint ("Mental Health and Pica"). Common eating disorders include anorexia nervosa, bulimia nervosa, and binge eating disorder. Anorexia nervosa is further categorized into two forms: restricting type and binge-eating and purging type (Petre, 2017). Other less typical eating disorders consist of purging disorder, night eating syndrome, or eating disorders not otherwise specified (EDNOS). EDNOS describes individuals who have symptoms similar to the common eating disorders, but do not specifically fit into a category (Flynn et al, 2018).

Characteristics of Feeding and Eating Disorders

Feeding disorders are distinguished by the refusal or inability to consume food. Indications for eating disorders can be emotional and physical. An individual suffering from an eating disorder may show signs of insecurity and obsessiveness when it comes to dieting and body size. Physical manifestations reveal fluctuations in weight, amenorrhea, dry skin, and sleep problems. Specific symptoms related to anorexia nervosa includes an individual who dresses in layers or baggy clothes to conceal weight loss. Following an exorbitant exercise routine and diet plan is also an indicator for an individual battling anorexia nervosa. Habits performed by persons suffering with bulimia nervosa include signs of binge eating and purging, cuts and calluses on knuckles and backs of hands, and

consuming large amounts of water. These individuals will make regular trips to the restroom and constantly be chewing gum, mints, or using mouthwash to hide the odor of vomit ("Warning Signs and Symptoms", 2018). There are also oral implications that may reveal clinical signs of eating disorders, which will be discussed below.

Prevalence

Children account for most cases of feeding disorders. Normally developing children are responsible for 20-50% of all feeding disorders, while those with developmental disabilities account for 70-89% (Benjasuwantep, Chaithirayanon, & Eiamudomkan, 2013). According to the National Eating Disorders Association (NEDA), "20 million women and 10 million men in the United States suffer from a clinically significant eating disorder at some point in their life", as cited in Gawel, (2017). The National Association of Anorexia Nervosa and Associated Disorders (ANAD) states that 0.9% of American women will be afflicted with anorexia and 1.5% with bulimia in their lifetime ("Eating Disorder Statistics"). It has also been shown that 50-80% of anorexia and bulimia cases are genetic ("Eating Disorder Statistics"). Mood disorders like depression and anxiety is seen in 33-50% of individuals living with anorexia and more than half of individuals with bulimia ("Eating Disorder Statistics").

General and Medical Needs and Services

It is obvious that feeding and eating disorders are both psychological disorders that require intervention, but other medical assistance is often necessary. For feeding disorders, occupational therapy or speech-language pathology may be beneficial (Arts-Rodas, & Benoit, 1998). Cognitive behavior therapy may also be helpful in the reduction of feeding disorders. Nutritional counseling and dietary interventions are very important in both feeding and eating disorders to prevent malnutrition. Many serious health consequences arise as a result of eating disorders. The most common repercussions include irregularities in the cardiovascular, gastrointestinal, neurological, and endocrine systems ("Heath Consequences", 2018). In addition to the stated conditions, there is an extremely high mortality rate in individuals with eating disorders. The combination of medical and psychological side effects related to eating disorders has given rise to a higher mortality rate than that of any other psychiatric disorders (Hamilton, Culler, & Elenback, 2018). With that being said, interventions including psychological and nutritional counseling are imperative for individuals suffering from eating disorders.

General Daily Lifestyle Accommodations

Children with significant feeding disorders will typically have to undergo feeding treatments that can last anywhere from a several sessions to several years ("What are feeding disorders"). Parents and caregivers play a vital role in the safety and treatment of caring for young children with feeding disorders. Individuals living with eating disorders often feel the need to live their lives in hiding, which may contribute to depression associated with the disorder. It is important that those with eating disorders set goals to maintain a healthy weight through moderate exercise and healthy nutrition. Another vital adjustment includes avoiding triggers that may cause the individual to relapse and revert to old habits.

Oral Manifestations of Feeding and Eating Disorders

Major oral effects related to feeding disorders are a result of malnutrition. There is an interdependent relationship between proper nutrition and oral health. Altered homeostasis due to malnutrition may lead to a disease progression in the oral cavity. This disease progression can lead to periodontal disease, decreased healing, and loss of teeth. In young children, malnutrition can interfere with the developmental process and eruption sequence in the oral cavity. Insufficient amounts of protein lead to delayed tooth eruption and possible microdontia. Epithelial tissue development is impaired with Vitamin A deficiency, and abnormal alveolar bone patterns are associated with Vitamin D and calcium insufficiency. Oral conditions such as angular cheilitis, halitosis, glossitis, burning tongue syndrome, ulcerative gingivitis, and periodontal disease are also associated with nutritional deficiencies (Sheetal, Hiremath, Patil, Sajjansetty, & Kumar, 2013).

Alterations in the oral cavity are often the first clinical sign of an eating disorder. Avulsed teeth are an indicator of pica, and trauma and bruising of the soft palate is apparent in the patient with bulimia. One of the most distinct indications of eating disorders in the dental office is enamel erosion. The constant exposure to an acidic environment plays a prominent role in the development of dental caries and causes extreme damage to the esophagus and oral mucosa. The overstimulation of saliva when preparing to induce vomiting causes a condition called parotid hypertrophy, which causes the parotid gland to appear enlarged (Norman, 2017). Other oral complications associated with eating disorders include xerostomia, temporomandibular joint disorders, and dysphagia ("Dental Complications of Eating Disorders", 2018).

The Role of the Dental Hygienist

Dental hygienist should never underestimate their role in the treatment of individuals with eating disorders. When an eating disorder is suspected, it is imperative to initiate a conversation to discuss oral findings from the exam. It is known that individuals with eating disorders aim to keep their condition secret, so a non-judgmental demeanor is crucial. Open-ended questions in a private environment encourages patient communication and trust (Johnson, Boyd, Rainchuso, Rothman, & Mayer, 2015).

Self-Care Recommendations

Recommendations for patients with eating disorders should be made to enhance the condition of the oral cavity. The misconception of brushing following purging is a major issue and only leads to further enamel damage. Brushing should be avoided for at least one hour following purging, however, the use of a sodium fluoride rinse is effective in neutralizing the acidic environment. Saliva stimulants should be recommended to patients experiencing xerostomia, and fluoride treatments should be encouraged to enhance remineralization and decrease caries rate (Steinberg, 2014).

Dental Hygiene Care Plan

A complete exam should be performed to determine if a patient has an eating disorder. Clinical signs will be revealed through an intraoral and extraoral exam and signs of periodontal disease can be exhibited through a periodontal assessment. Diagnostic tools like the intraoral camera may be used for patient education, and nutritional

counseling is beneficial for patients with eating disorders. Following periodontal debridement, a fluoride treatment will aid in remineralization and caries prevention. Referral for restorative treatment may also be recommended. Patients with eating disorders may benefit from a more frequent re-care interval to maintain accountability.

Concluding Opinion

From my research, I have gained much knowledge on how to recognize and treat patients with feeding and eating disorders. The chances of treating a patient suffering from one of these disorders are not uncommon. Information on detection, patient communication, and treatment

References

1. Arts-Rodas, D., & Benoit, D. (1998). Feeding problems in infancy and early childhood: Identification and management. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2851259/
2. Benjasuwantep, B., Chaithirayanon, S., & Eiamudomkan, M. (2013, June 13). Feeding Problems in Healthy Young Children: Prevalence, Related Factors and Feeding Practices. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3718228/
3. Dental Complications of Eating Disorders. (2018, February 22). Retrieved from https://www.nationaleatingdisorders.org/dental-complications-eating-disorders
4. Eating Disorder Statistics • National Association of Anorexia Nervosa and Associated Disorders. (n.d.). Retrieved from http://www.anad.org/education-and-awareness/about-eating-disorders/eating-disorders-statistics/
5. Feeding Disorders. (n.d.). Retrieved from https://www.kennedykrieger.org/patient-care/conditions/feeding-disorders
6. Flynn, E., Smith, C. H., Walsh, C. D., & Walshe, M. (2018, September 24). Modifying the consistency of food and fluids for swallowing difficulties in dementia. Retrieved from https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD011077.pub2/full?highlightAbstract=deficienci&highlightAbstract=health&highlightAbstract=nutritional&highlightAbstract=defici&highlightAbstract=oral&highlightAbstract=deficiencies&highlightAbstract=nutrit
7. Gawel, R. (2017, June 19). The Dentist's Role in Treating Patients with Eating Disorders. Retrieved from http://www.dentistrytoday.com/news/todays-dental-news/item/2099-the-dentist-s-role-in-treating-patients-with-eating-disorders
8. Hamilton, G., Culler, L., & Elenback, R. (2018, February 8). Anorexia Nervosa – Highest Mortality Rate of Any Mental Disorder: Why? Retrieved from https://www.eatingdisorderhope.com/information/anorexia/anorexia-nervosa-highest-mortality-rate-of-any-mental-disorder-why
9. Health Consequences. (2018, February 22). Retrieved from https://www.nationaleatingdisorders.org/health-consequences
10. Johnson, L., Boyd, L., Rainchuso, L., Rothman, A., & Mayer, B. (2015). Eating disorder professionals' perceptions of oral health knowledge. International Journal of Dental Hygiene, 15(3), 164-171. doi:10.1111/idh.12183

11. Kleinert, J. O. (2017, April). Pediatric Feeding Disorders and Severe Developmental Disabilities. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/28324901
12. Mental Health and Pica. (n.d.). Retrieved from https://www.webmd.com/mental-health/mental-health-pica#1
13. Norman, G. (2017, September 25). The Effect of Bulimia on the Parotid Gland. Retrieved from http://www.ohniww.org/effect-bulimia-parotid-gland/
14. Petre, A., MS, RD (CA). (2017, September 28). 6 Common Types of Eating Disorders (and Their Symptoms). Retrieved from https://www.healthline.com/nutrition/common-eating-disorders#section4
15. Sheetal, A., Hiremath, V. K., Patil, A. G., Sajjansetty, S., & Kumar, S. R. (2013, January). Malnutrition and its Oral Outcome – A Review. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576783/
16. Steinberg, B. J. (2014, June 01). Medical and Dental Implications of Eating Disorders. Retrieved from http://jdh.adha.org/content/88/3/156
17. Warning Signs and Symptoms. (2018, February 22). Retrieved from https://www.nationaleatingdisorders.org/warning-signs-and-symptoms
18. What are feeding disorders? (n.d.). Retrieved from https://www.chw.org/medical-care/gastroenterology-liver-and-nutrition-program/conditions/feeding-disorders