

Speech therapy follow-up for eating difficulties with juvenile child cancer: a series of cases

Acompanhamento fonoaudiológico nas dificuldades alimentares no câncer infanto-juvenil: uma série de casos

Seguimiento fonoaudiológico en las dificultades de alimentación en el cáncer infantojuvenil: una serie de casos

Julianne Wagner*

Camila Lucia Etges*

Lisiane De Rosa Barbosa*

Abstract

Objective: This study was aimed to report speech therapy follow-up for eating difficulties with childhood cancer. Methods: The retrospective and descriptive-qualitative case series study was sampled composed of patients aged between 8 and 14 years, under follow-up with the Pediatric Oncology Service of the Hospital da Criança Santo Antônio – Irmandade Santa Casa de Misericórdia de Porto Alegre, with a request for speech therapy evaluation for swallowing/feeding research. The collection was performed through data extracted from the institution's electronic medical records, with the evolution of the cases of patients hospitalized and attended in an outpatient clinic, from March 2018 to August 2019. Results: In the 3 reported cases, the patients presented normal swallowing, with indication of feeding tubes by impairment in oral food intake during and/or after cancer treatment. The dietary complaints due to the side effects of treatment were inapetence, taste change, nausea and vomiting. The cases were followed during hospitalization and in the speech therapy outpatient clinic. Two of the patients remained on a feeding tube for a long time and one of them reestablished exclusive oral feeding. Conclusion: The speech therapist inserted in the multidisciplinary team of care for patients with childhood cancer is one of those

Authors' contributions:

JW: Study design, Methodology; Data collection; Article outline. CLE: Study design, Methodology; Critical review; Guidance.

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 $\textbf{Correspondence e-mail:} \ \textbf{Julianne Wagner - fono.juliannewagner@gmail.com}$

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^{*} Universidade Federal de Ciências da Saúde de Porto Alegre, RS, Brazil.



responsible for follow-up of eating difficulties caused by the disease and treatments, with a look beyond oropharyngeal dysphagia. Its performance should involve strategies that promote adequate nutrition, either alternatively or orally, aiming at safety and comfort, with respect to the patient's autonomy.

Keywords: Speech, Language and Hearing Sciences; Feeding Disorders; Oncology

Resumo

Objetivo: Este estudo teve como objetivo relatar o acompanhamento fonoaudiológico nas dificuldades alimentares no câncer infanto-iuvenil. Métodos: O estudo de série de casos retrospectivo e descritivo-qualitativo teve amostra composta por 3 indivíduos com idade variando entre 8 e 14 anos, em acompanhamento com a equipe do Serviço de Oncologia Pediátrica do Hospital da Criança Santo Antônio – Irmandade Santa Casa de Misericórdia de Porto Alegre, com solicitação de avaliação fonoaudiológica para investigação de deglutição/alimentação. A coleta foi realizada por meio de dados extraídos de prontuário eletrônico da instituição, onde constavam as evoluções dos casos dos pacientes internados e atendidos em ambulatório, de março de 2018 a agosto de 2019. Resultados: Nos 3 casos relatados, os pacientes apresentaram deglutição normal, com indicação de via alternativa para alimentação pelo prejuízo na ingestão oral de alimentos durante e/ou após o tratamento oncológico. As queixas alimentares devido aos efeitos colaterais do tratamento foram inapetência, alteração de paladar, náusea e vômitos. Os casos foram acompanhados durante a internação e em ambulatório de fonoaudiologia. Dois dos pacientes permaneceram com a via alternativa por tempo prolongado e um deles reestabeleceu a alimentação por via oral exclusiva. Conclusão: O fonoaudiólogo inserido na equipe multidisciplinar de cuidados ao paciente com câncer infanto-juvenil é um dos responsáveis pelo acompanhamento das dificuldades alimentares provocadas pela doença e tratamentos, com olhar além da disfagia orofaríngea. A sua atuação deve envolver estratégias que promovam a nutrição adequada, seja por via alternativa ou via oral, visando segurança e conforto, com respeito à autonomia do paciente.

Palavras chave: Fonoaudiologia; Transtornos da Alimentação e da Ingestão de Alimentos; Oncologia

Resumen

Objetivo: Este estudio tenía como objetivo de relatar el seguimiento fonoaudiológico en las dificultades de alimentación en el cáncer infantil. Métodos: El estudio retrospectivo y descriptivo-cualitativo de la serie de casos estaba compuesto por 3 individuos de entre 8 y 14 años, bajo seguimiento con el equipo de Servicio de Oncología Pediátrica del Hospital da Criança Santo Antônio - Irmandade Santa Casa de Misericórdia de Porto Alegre, con solicitud de evaluación fonoaudiológica para la investigación de la deglutición/alimentación. La recopilación se realizó a través de datos extraídos de la historia clínica digitalizada institucional con la evolución de los casos de pacientes hospitalizados y atendidos en un servicio de consulta externa, de marzo de 2018 a agosto de 2019. **Resultados:** En los 3 casos reportados, los pacientes presentaron deglución normal, con indicación de vía alterna de alimentación por presentar dificultad en la ingesta oral de alimentos durante y/o después del tratamiento oncológico. Las quejas alimenticias asociadas a los efectos secundarios del tratamiento fueron la pérdida del apetito, alteración en el sentido del gusto, náuseas y vómito. Los casos fueron acompañados por el fonoaudiólogo durante la hospitalización y el servicio de consulta externa. Dos de los pacientes permanecieron con via alterna de alimentación durante un tiempo prolongado y uno de ellos restableció la alimentación por vía oral por completo. Conclusión: El fonoaudiólogo como parte del equipo multidisciplinario de atención en pacientes con cáncer infantil, es uno de los responsables del seguimiento de las dificultades de alimentación causadas por la enfermedad y los tratamientos, con una mirada más allá de la disfagia orofaríngea. Su actuación debe incluir estrategias que promuevan una nutrición adecuada, ya sea por vía alterna o vía oral, con el objetivo de garantizar la seguridad y comodidad del paciente y respetando su autonomía.

Palabras clave: Fonoaudiología; Transtornos de Alimentación y de la Ingestión de Alimentos; Oncología



Introduction

Child and youth cancer corresponds to a group of diseases characterized by the uncontrolled proliferation of abnormal cells, which can occur anywhere in the body, as defined by the National Cancer Institute (INCA). In this age group, the most common tumors are leukemias (which affect white blood cells), those of the central nervous system and lymphomas (lymphatic system). Due to the predominance of an embryonic nature, tumors in children and adolescents are made up of undifferentiated cells, which, in general, favors the response to current treatments.

Medical cancer treatment comprises three main modalities: surgery, radiotherapy and chemotherapy². Surgery is the oldest treatment, being particularly used in solid tumors, aiming at curative resection, and can be used for diagnostic, prognostic, prophylactic or palliative purposes. Radiotherapy is a local and/or regional treatment that uses ionizing radiation beams to destroy tumor cells. Chemotherapy, on the other hand, is a treatment based on the use of drugs that prevent the formation of new DNA molecules, thus, blocking essential cell functions or inducing apoptosis. Chemotherapeutic drugs are toxic, not only to malignant tissue, but also to normal structures that are constantly being renewed, such as bone marrow, hair follicles and the mucosa of the gastrointestinal tract and reproductive system³.

The oncological disease and the treatment itself can cause several side effects, which can interfere with nutritional status, eating behavior and, consequently, the quality of life of the patients. Amongst these, there are feeding difficulties, involving changes in taste, food refusal, mucosite, dry mouth and dysphagia⁴. Side effects in the gastrointestinal tract may also occur, such as nausea, vomiting, diarrhea, constipation and inappetence^{5,6}. Due to malnutrition, this group presents greater risks of intolerance to chemotherapy, susceptibility to infections, low immunity, impaired wound healing and, even, tumor recurrence⁷.

Feeding involves the act of eating or drinking, including the preparation of food and liquids for ingestion, sucking or chewing and swallowing. The swallowing process is complex and is defined by the transport of saliva, liquids and food from mouth to stomach, keeping the airways protected. When

there is any difficulty or change in this mechanism, you call it oropharyngeal dysphagia⁸.

Eating disorders, on the other hand, comprise a series of difficulties related to eating, which may or may not involve swallowing8. In general, eating difficulties, compromise adequate nutrition and have multifactorial causes, which may include organic pathology, such as cancer, motor-oral, behavioral and/or developmental problems. They are characterized by a deviation from eating behavior, refusal to eat, selective ingestion, small portion of ingested food and aversion to food⁹. The term "pediatric eating disorder" recently proposed to unify eating difficulties in the childhood, is defined by impaired oral ingestion, which is not age-appropriate and is related to medical, nutritional, eating and/or psychosocial problems. It refers to the inability to consume enough food and fluids to meet nutritional and hydration needs, and must be present daily, for at least two weeks10.

In the hospital environment, one of the main reasons for requesting speech therapy evaluation is the suspicion of oropharyngeal dysphagia. When, after a careful evaluation, the dysphagic patient does not present conditions for nutrition and hydration by oral route in a safe and functional way, the speech therapist, together with a multidisciplinary team, usually indicates an alternative feeding route¹¹.

In pediatrics, it is known that enteral feeding is indicated in situations such as: risk of pulmonary aspiration; swallowing disorder; critical patients on mechanical ventilation; change in the consciousness level; higher caloric and protein requirements than those achieved by oral feeding; transition from parenteral to oral nutrition; malnourished patient's diet, cancer being one of the diseases that commonly need nutrition through this route¹². According to the National Consensus of Oncological Nutrition, enteral therapy is indicated when the oral route is insufficient, in other words, in the presence of oral ingestion around 60% of nutritional necessities, or when the patient cannot use the oral route¹³.

In view of the need to understand and study the role of the speech therapist in the specificity of the area under discussion, in addition to dysphagia, the aim of the study was to report the speech therapy follow-up on dietary difficulties based on the retrospective analysis of 3 cases of childhood cancer.



Material and methods

This is a retrospective and descriptive-qualitative case series study, carried out based on data presented by patients during hospitalization and outpatient care at Hospital da Criança Santo Antônio - Irmandade Santa Casa de Misericórdia de Porto Alegre. It is approved by the Research Ethics Committee of this same hospital, under Opinion number 1.871.433. Family members and patients who agreed to participate in the research signed, respectively, the Terms of Free and Informed Consent and Assent.

The study involved a convenience sample composed of patients followed by the team of the Pediatric Oncology Service of this hospital, which provide for children and adolescents from the age of 0 to 17 years and 11 months. The collection was carried out using data extracted from the institution's electronic medical record, which included medical developments and other medical teams for hospitalized patients from March 2018 to August 2019. The inclusion criteria were patients who had a medical diagnosis of cancer and requested a speech-language assessment to investigate swallowing/feeding. The exclusion criteria were patients with oropharyngeal dysphagia, and/or eating problems prior to the oncological diagnosis and not signing the ethical terms.

To describe this series of cases and characterize the sample, the following variables were collected from medical records: sex, medical diagnosis, age at the time of the cancer diagnosis, age at the first speech therapy evaluation, nutritional diagnosis, type of oncology treatment(s) performed, medications used in chemotherapy treatment and data from speech therapy evaluation. The speechlanguage evaluation was composed of an initial interview with the main complaints, evaluation with the Pediatric Dysphagia Clinical Evaluation Protocol (PAD-PED)¹⁴, defined as a standard by the assistance team in this hospital. The PAD-PED protocol includes variables related to the structural and functional examination of phonoarticulatory organs and observation with established criteria for swallowing saliva and food in different consistencies, shapes and utensils, also proposing the classification of swallowing. In order to record the identified eating behaviors, the main findings were recorded in a descriptive manner, without the use

of a specific protocol, at the time of the research collection.

The evaluators were two resident speech therapists, participants in the Multiprofessional Residency Program with an emphasis on Child Cancer Care at UFCSPA/ISCMPA, trained by the residence's tutor and preceptor, on the instruments and procedures used in the service routine. The food supply was carried out spontaneously by parents/ caregivers and the following were observed: type of food, consistency and utensils used, pace of supply, interaction and family management, main symptoms of feeding difficulties and adverse effects, such as vomiting and nausea, before, during and after food supply⁸. Additionally, data related to speech therapy strategies and conduct were collected, such as adapting the diet, indicating an alternative route for feeding and monitoring the cases. For the control of food ingestion, a food diary was filled out by the parents/caregivers. The speech therapy team at this hospital records the main findings on eating behavior without the use of a specific protocol.

Case Studies

In this study, as they did not meet the inclusion criteria, two cases were excluded from this sample. The first excluded case was being followed-up with the speech therapy team, however, it was not possible to obtain the signature of the mandatory ethical terms, since the team, after the patient's death, was unable to contact the legal guardian. In the second case excluded from the study, during the evaluation process, a history of feeding difficulties prior to the diagnosis of childhood cancer was identified.

Case 1

Female patient, diagnosed with grade II Ependymoma at the age of fourteen years and eight months. As treatment, she underwent partial tumor resection and radiotherapy. Two months after radiotherapy, a fifteen-year-old patient was admitted due to low food intake due to lack of appetite, nausea and vomiting. At this point, speech therapy was started, following the medical request to investigate oropharyngeal dysphagia. In an initial interview, the patient complained of altered taste, lack of appetite, nausea and vomiting. In the structural and functional evaluation of phonoarticulatory organs,

she presented oral structures and functions within the normal range. In the clinical evaluation of swallowing, she presented normal swallowing and absence of clinical signs suggestive of laryngotracheal penetration and/or aspiration. In order to reestablish nutrition, pleasure and oral comfort, adjustments were made to the food plan, with the addition of food supplementation and adaptation of the menu to her preferences, together with the nutrition team. The nutritional assessment was diagnosed as being thin (WHO, 2007), with food ingestion <60% of daily caloric needs. No nutritional diagnosis was found in the medical record prior to cancer treatment. In view of the worsening of the nutritional status, in a case discussion with a multidisciplinary team, an alternative route for food was suggested, with gastrostomy being the best option accepted by the patient. In addition to the alternative route, oral feeding was maintained, as it was accepted. After hospital discharge, the patient was followedup through a speech therapy outpatient clinic for oral feeding management, considering that she remained complaining about the lack of appetite, in addition to demotivation and digestive discomfort, which hindered the progression of an oral diet. She presented resistance in the administration of the diet by alternative route, as well as in oral feeding. During outpatient speech therapy follow-up, the following were performed: counseling to the patient and family due to the unfavorable clinical condition; encouragement to return to oral feeding, as desired by the patient, welcoming and respecting her feelings and discomfort; control of food ingestion; guidance on the possibilities of utensils, food consistencies, flavors and temperatures according to her preferences, suggesting citrus and ice cream foods for possible better acceptance. The patient was also monitored by the nutrition and psychology teams, with little adherence to treatments. After one year and four months in gastrostomy, the nutritional diagnosis remained the same, although oral feeding progressed to three times a day, three times through gastrostomy. It should be noted that the diagnosis of the psychology team warned of the interference of behavioral aspects in the treatment of the patient, including the management and monitoring of food.

Case 2

Male patient, diagnosed with classic grade IV medulloblastoma (cerebellum) at the age of eight years and two months. As the treatment, he

underwent total tumor resection, radiotherapy and chemotherapy. The drugs used in the chemotherapy treatment were as follows: cisplatin, vincristine and cyclophosphamide. Speech therapy follow-up was started at eight years and ten months, during the 3rd chemotherapy cycle, when an evaluation was requested due to complaints of lack of appetite and low food acceptance since the beginning of chemotherapy treatment. In an initial interview, the patient reported altered taste, with a preference for fatty and salty foods, nausea, vomiting and difficulty tolerating the odor of some foods. In the structural and functional evaluation of phonoarticulatory organs, he presented oral structures and functions within the normal range. In the clinical evaluation of swallowing, he presented normal swallowing and absence of clinical signs suggestive of laryngotracheal penetration and/or aspiration. Adjustments were made to the food plan, with the addition of food supplementation and adaptation of the menu to his preferences, together with the nutrition team. However, the patient remained with very low acceptance, this being <60% of the daily caloric needs, despite the nutritional diagnosis of eutrophy (WHO, 2007), but with nutritional risk due to progressive weight loss. In a multidisciplinary discussion, alternative feeding was suggested. Initially, the nasoenteral catheter (SNE) was used, remaining less than 24 hours due to loss in an episode of vomiting, in which the patient refused to pass it on, reporting pain. The multidisciplinary team decided to attempt an oral diet again. It was found the persistence of low acceptance of food, with gastrostomy being recommended, which was performed at the end of the 6th chemotherapy cycle. In addition to the alternative route for feeding, the patient remained on oral feeding, as it was accepted. After completing the cancer treatment, speech therapy was followed-up on an outpatient basis, with assistance for oral food management. The patient was also followed-up by the nutrition team via an outpatient clinic. During caretaking, the following were performed: counseling to the patient and family due to the unfavorable clinical condition; encouragement to return to oral feeding, as desired by the patient, welcoming and respecting his feelings and discomfort; control of food ingestion; guidance on the possibilities of utensils, food consistencies, flavors and temperatures according to his preferences, suggesting citrus and ice cream foods for possible better acceptance. The patient



showed an improvement in appetite and a progressive increase in food ingestion, with a nutritional diagnosis of eutrophy (WHO, 2007). Due to the evolution of the condition, the gastrostomy was removed four months after the end of chemotherapy, totaling six months.

Case 3

Male patient, diagnosed with a mixed germ cell tumor, consisting of mature Teratoma (about 60%) and endodermal sinus tumor (40%), with pulmonary metastasis and retroperitoneum, at the age of fourteen years and ten months. As a treatment, he performed an orchiectomy, resection of a retroperitoneal tumor, lower and middle lobectomy and chemotherapy. The drugs used in the chemotherapy treatment were as follows: cisplatin, etoposide and ifosfamide. Since the beginning of chemotherapy, the patient has presented very low acceptance of oral feeding, being almost null, acceptance of fluids is higher. Speech therapy was started at the age of fifteen, in the 2nd cycle of chemotherapy. In an initial interview, he reported lack of appetite, nausea and vomiting when trying to eat and changes in taste, needing to spit his saliva frequently in order to avoid swallowing, due to a bitter taste complaint. In the structural and functional evaluation of phonoarticulatory organs, he presented oral structures and functions within the normal range. In the clinical evaluation of swallowing, he presented normal swallowing and absence of clinical signs suggestive of laryngotracheal penetration and/or aspiration. The patient had a nutritional diagnosis of eutrophy (WHO, 2007), with nutritional risk due to progressive weight loss. Adjustments were made to the food plan, with the addition of food supplementation and adaptation of the menu to his preferences, together with the nutrition team. However, the patient remained with very low acceptance of food, that being <60% of the daily caloric needs. Given the situation, it was suggested alternative food for an adequate nutrition. The patient used SNE for food for two days, lost it when vomiting and refused to pass it on again. It was observed that in the interval periods of the chemotherapy cycles, the patient had greater food ingestion, being defined, by a multidisciplinary team, the maintenance of the diet by oral route exclusively. The patient was still undergoing treatment when the data were collected, being monitored by the speech therapy team during hospitalizations, at the beginning of chemotherapy treatment.

The data collected for the characterization of the sample can be seen in Chart 1.

Chart 1. Data collected for sample characterization

	Case 1	Case 2	Case 3
Sex	Female	Male	Male
Age of medical diagnosis	14	8	14
Oncological diagnosis	Ependymoma	Medulloblastoma	Germ cell tumor
Medical treatment	Surgery and radiotherapy	Surgery, radiotherapy and chemotherapy	Surgery and chemotherapy
Drugs used in the chemotherapy treatment	-	Cisplatin, vincristine and cyclophosphamide	Cisplatin, etoposide and ifosfamide
Start of speech therapy follow-up	After the radiotherapy	During chemotherapy	During chemotherapy
Speech therapy diagnosis	Eating disorder	Eating disorder	Eating disorder
Main symptoms of feeding difficulties	Inappetence, alteration in taste, nausea, vomiting.	Inappetence, alteration in taste, nausea, vomiting, difficulty tolerating the smell of food.	Inappetence, alteration in taste, nausea, vomiting.
Nutritional diagnosis (WHO, 2007)	Thin	Eutrophy	Eutrophy
Feeding route during the follow-up	Orally and gastrostomy	Orally, nasoenteral catheter and gastrostomy	Orally and nasoenteral catheter
Time of using the alternative route for feeding	17 months (using)	2 days with the nasoenteral catheter and 6 months with gastrostomy	2 days
Location of speech therapy	Inpatient and outpatient	Inpatient and outpatient	Inpatient



Discussion

The speech therapy performance in feeding difficulties is recent in Brazil, with a lack of longitudinal studies and case reports, which is a restrictive factor for the better discussion of the speech therapy follow-up of the pediatric cancer patient. The speech therapist has won the recognition of the assessment and treatment of oropharyngeal dysphagia by multidisciplinary teams, however the work with food problems is still being built.

A recent study that evaluated the prevalence of speech-language disorders in children and adolescents at the time of enrollment in an oncology institute, described the occurrence of dysacusis, dysarthria, dysphagia, facial and tongue paralysis in this audience¹⁵. The study did not include the eating difficulties that affect this audience and that were found in our study.

From the cases described, it was possible to observe some of the dietary difficulties experienced by pediatric patients during cancer treatment, with consequent impairment in oral food ingestion. In "Case 2" and "Case 3", the symptom of lack of appetite occurred during chemotherapy treatment, and in "Case 1" after the radiotherapy intervention, with an important aggravation of the lack of appetite leading to a hospital readmission. A prospective study, recently published, which included 125 children with cancer and aimed to describe the frequency and most common eating difficulties in this period, showed that more than 90% of them had at least one eating disorder, the most frequent being inadequate eating due to lack of appetite¹⁶.

The child population with cancer may be susceptible to the effects of changes in taste, a complaint common to the three cases in the present study. Patients with cancer have significant changes in the threshold for the detection of flavors when compared to patients without cancer^{17,18}. During treatment, chemotherapy and/or radiotherapy, changes in taste and odor sensitivity may occur, as well as metallic and bitter sensations, frequently reported by patients. These have been associated with decreased appetite, food ingestion and impaired quality of life¹⁹.

Another study emphasizes the need for greater awareness among clinicians in cases of taste disorders. It is stated that chemotherapeutic agents used in the treatment of cancer, as single or in combination drugs, can have significant side effects, because

they do not act only on tumor cells. Amongst these, the ones most associated with changes in taste include cisplatin, vincristine, cyclophosphamide, carboplatin, doxorubicin, fluorouracil, methotrexate and levamisole²⁰. The three drugs used to treat the patient in "Case 2" are described in this list. The patient in case "Case 3" used one of them. The article offers management suggestions and proposes that the first step is to recognize the symptoms as a real clinical problem, and then look for the causative drug. Amongst the recommendations, there are the identification of other problems related to the alteration in the taste, improvement of oral hygiene, reduction of the dose or substitution by an equivalent drug, avoiding excessive mouth washing and aggressive brushing, using sugar-free chewing gums or pieces of ice to help reduce symptoms.

Other symptoms that constitute a risk factor for malnutrition are diarrhea, nausea, vomiting, mucosite, dry mouth, esophagitis and constipation, being nausea and vomiting also observed in all cases of this study. It is known that malnutrition and accelerated weight loss are frequent in cancer patients, occurring due to local and metabolic changes produced by the tumor cells, as well as the side effects of antineoplastic treatment²¹.

In this study, the alternative route of feeding was indicated to all patients, due to insufficient ingestion of food orally, and this decision was discussed amongst the multidisciplinary team composed of an oncologist, nutritionist and speech therapist, including family members and a patient. A study that assessed the tolerance and efficacy of preventive gastrostomy feeding in pediatric oncology found that gastrostomy was used in preference to the nasogastric catheter due to the duration of enteral nutrition and its better tolerance in terms of physical and psychological acceptance by patients⁷. Patients in "Case 1" and "Case 2" showed better acceptance for gastrostomy, corroborating the findings of the study mentioned.

In general, the speech therapist participates in the indication of gastrostomy in cases of oropharyngeal dysphagia²². Although it is not a usual speech therapy conduct for patients with normal swallowing, in the face of a feeding difficulty related to cancer treatment, which the oral food ingestion is impaired, the indication of the alternative feeding route must be considered. The choice of the most appropriate method will depend on the situation involving the patient, the best method being the



one that, considering the different circumstances, provides less risk and greater efficiency to obtain the best cost-benefit ratio, in addition to the agreement of the patient and his family and the multi-disciplinary team experience. The early indication of enteral nutrition is one of the main objectives of nutritional therapy in children and adolescents with cancer. In the last decades, there has been a significant increase in indications in more developed countries, with good results regarding the recovery and/or maintenance of nutritional status²³.

During treatment, due to refusal to eat, the patient may suffer from inadequate handling and negative feeding practices by families, such as forcing them to eat, which can cause psychological problems, stress and conflicts between patients and their families. It is known that the effects of the disease itself, the treatment, and problems in food and nutrition caused by these side effects have a negative effect on the patient's, and family's, physical, emotional, environmental and sociocultural comfort^{24,25}.

A study on the role of the speech therapist in the diagnosis and multidisciplinary treatment of children with feeding difficulties, presented a case characterized by food refusal, prolonged meals, sensory-oral defense, anterior vomiting reflex and masticatory difficulty. The study suggested an expanded view of the problem, using a Shared Meal Program. The mother was instructed to fill a food diary for three alternate days with notes on the time of consumption, amount ingested, with a description of all the utensils used and ways of preparing the food. From the analysis of the case, the multidisciplinary team defined behaviors and guidelines, such as: reduction of pressure to eat, stimulation of autonomy and food independence; importance of providing pleasant oral experiences; respect to food preferences and satiety demonstrations; nutritional adequacy of quantity, volume, variety, presentation, schedules, inclusion in the food preparation process, from the purchase of the products, the preparation to the assistance in placing the plates, cutlery and glasses on the table; reduction of dispersive stimuli, such as TV and toys; inclusion of family traditions and social routines²⁶. The behaviors mentioned by this study can be used as therapeutic strategies in the care of patients with childhood and juvenile cancer, respecting the particularities of this group.

The speech therapist who works with eating disorders must always improve the relationship of the patient with the mouth, the food, and of the parents with their child, at the time of the meal, providing autonomy and independence when eating. This professional has an important role in the reconstruction of food pleasure, confidence and oral comfort, so that it is possible to return to pleasant food orally and free from negative eating practices⁹. It is essential to promote a space for active listening, being attentive to the complaints and demands of the patient and family, with a view to providing adequate and empathetic counseling. This study provided greater understanding and exchange of experiences with a multidisciplinary team on the aspects and particularities of dietary difficulties in childhood and adolescent cancer, as well as identification of the limitations of performance.

Concluding remarks

The speech therapist included in the multidisciplinary team to care for the pediatric cancer patients is one of the professionals qualified to carry out the diagnosis and follow-up of patients with eating difficulties. The speech therapy follow-up of these patients involves guidance to the patient and family, in view of the unfavorable clinical situation, the use of therapeutic strategies to reduce eating difficulties, working together with a multidisciplinary team and participating in the decision of the best route of food during different stages of treatment, as well as reintroduction of oral feeding, if possible. It is suggested to propose studies involving a larger number of patients, detailing the specifics of speech therapy in childhood cancer.

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