Original Article

https://doi.org/10.1590/2317-6431-2019-2262

Audiology Communication Research
ISSN 2317-6431

Speech therapy for patients with oropharyngeal dysphagia in palliative care

Atendimento fonoaudiológico para pacientes em cuidados paliativos com disfagia orofaríngea

Lauanda Barbosa dos Santos[1], *Cláudia Tiemi Mituuti*[2], *Karen Fontes Luchesi*[2]

ABSTRACT

Purpose: To characterize the changes related to swallowing and the main interventions and management of speech therapy in patients with oropharyngeal dysphagia in palliative care. **Methods:** Observational prospective descriptive study conducted with 20 patients in palliative care at the University Hospital of the Federal University of Santa Catarina. Data were collected regarding the patients health history, prescribed diet, time of hospitalization and speech therapy evaluation and intervention. Clinical evaluation of swallowing was also performed on bedside, using the Functional Oral Intake Scale (FOIS). A semi-structured questionnaire was applied with questions about patient's satisfaction related to feeding. **Results:** Most of the sample was composed of men with 75 years of age on average, all under palliative care due to different diseases and health problems. The average time of hospital stay was 15 days and most patients died during hospitalization. The most common food consistencies used for evaluation were liquid and honey. The most common sign of penetration and/or laringo-tracheal aspiration was the "wet" voice after swallowing. As to FOIS, half the sample was at level 5 and part at level 1. The most common interventions used were consistency modification, multiple swallowing maneuvers and swallowing with effort. From the survey, it was found that most patients were satisfied with the diet served by the hospital. **Conclusion:** The most frequently encountered changes related to swallowing were clinical signs of penetration and/or laringo-tracheal aspiration. The main interventions were adjustments of the prescribed diets consistency and compensatory maneuvers. Most patients continued during hospitalization with oral feeding, respecting the desire of the patients and their family members.

Keywords: Deglutition; Deglutition disorders; Speech, Language and Hearing Sciences; Palliative care; Quality of life

RESUMO

Objetivo: Caracterizar as alterações relacionadas à deglutição e as principais intervenções e condutas fonoaudiológicas em pacientes em cuidados paliativos, com disfagia orofaríngea. **Métodos:** Estudo observacional, prospectivo, descritivo, realizado com 20 pacientes em cuidados paliativos, em internação hospitalar no Hospital Universitário da Universidade Federal de Santa Catarina. Foram coletados dados do histórico de saúde, dieta prescrita, tempo de internação, avaliação e intervenção fonoaudiológica. Também foi realizada avaliação funcional da deglutição no leito hospitalar, classificação na *Functional Oral Intake Scale* (*FOIS*) e aplicado um questionário sobre a satisfação do paciente quanto à alimentação. **Resultados:** A maioria dos participantes era homem, com média de idade de 75 anos, que se encontrava sob cuidados paliativos por diversos tipos de doenças e agravos à saúde. O tempo médio de internação foi de 15 dias e a maioria evoluiu a óbito durante a internação. As consistências mais utilizadas para avaliação foram líquida e mel. O sinal de penetração e/ou aspiração laringotraqueal mais frequente foi voz "molhada" após a deglutição. Quanto à *FOIS*, metade da amostra encontrava-se no nível 5 e pequena parte no nível 1. As intervenções mais utilizadas foram modificação de consistência, manobras de múltiplas deglutições e deglutição com esforço. A partir do questionário, verificou-se que a maioria estava satisfeita com a dieta servida pelo hospital. **Conclusão:** As alterações mais encontradas, relacionadas à deglutição, foram sinais clínicos de penetração e/ou aspiração laringotraqueal. As principais intervenções foram ajuste nas consistências das dietas e manobras compensatórias. A maioria seguiu durante a internação com alimentação por via oral, respeitando o desejo dos pacientes e seus familiares.

Palavras-chave: Deglutição; Transtornos de deglutição; Fonoaudiologia; Cuidados paliativos; Qualidade de vida

Study carried out at Universidade Federal de Santa Catariana – UFSC – Florianópolis (SC), Brasil.
[1]Centro de Pesquisas Oncológicas – CEPON – Florianópolis (SC), Brasil.
[2]Departamento de Fonoaudiologia, Universidade Federal de Santa Catarina – UFSC – Florianópolis (SC), Brasil.
Conflict of interests: No.
Authors' contribution: LBS bibliographic review, data collection and analysis, final writing of the article; CTM idealization and methodological design of the study, bibliographic review, data analysis, final writing of the article; KFL idealization and methodological design of the study, bibliographical review, data analysis, final writing of the article.
Funding: None.
Corresponding author: Cláudia Tiemi Mituuti. E-mail: claudia.mituuti@ufsc.br
Received: October 31, 2019; **Accepted:** January 31, 2020

This is an open-access article distributed under the terms of the Creative Commons Attribution License.

INTRODUCTION

According to the World Health Organization (WHO), Palliative Care are approaches to improve the quality of life of patients (adults and children) and family members who face problems associated with life-threatening diseases, through prevention, suffering relief, early identification, correct assessment and treatment of pain and other problems, physical, psychosocial and spiritual[1].

A multiprofessional team is advocated in palliative care, as it is a complex assistance, with the aim of meeting all the needs of the individual and of the family members. It may consist of a nurse, psychologist, doctor, social worker, pharmacist, nutritionist, physiotherapist, speech therapist, occupational therapist, dentist and spiritual assistant[2].

There is a range of diseases that require a palliative perspective, such as amyotrophic lateral sclerosis (ALS), Parkinson's disease (PD), Alzheimer's disease (AD) and osteoarticular diseases. In addition, there are elderly people with sequelae caused by other neurological diseases[3], respiratory, cardiac, among others. These diseases can evolve with changes in the swallowing and communication functions, impairing patients' and family members' quality of life.

Dysphagia is conceived as a symptom of an underlying disease, which can affect any part of the digestive tract, from the mouth to the stomach[4]. This alteration can promote nutritional and hydration deficit and pulmonary implications in cases of bronchial aspiration pneumonia, a factor that extends the length of hospital stay and reduces life quality and expectancy[5,6].

In the multiprofessional team of palliative care, the speech therapist aims to ensure patients' conviviality and interaction with family and friends, through communication and oral feeding in a pleasant and safest way possible, through rehabilitation or function management strategies, such as breathing, swallowing, voice and speech[7,8].

Aiming to contribute to a qualified service in palliative care in the field of Speech Therapy and in view of the small number of publications in this field, this study aimed to characterize the changes related to swallowing and the main speech therapy interventions and conduct in patients with oropharyngeal dysphagia in palliative care.

METHODS

This is an observational, prospective, descriptive study. The investigation was conducted with 20 patients in palliative care, during the period of hospitalization in a general hospital, with exclusive care by the Unified Health System (SUS), in the city of Florianópolis. The investigation was approved by the Ethics Committee of the Federal University of Santa Catarina, under protocol number 64325317.0.0000.0121 and all patients agreed to participate in the study by signing the Free and Informed Consent Form (FICF) or the Child/Adolescent Consent Form.

Inclusion criteria were: patients of both genders admitted to the hospital, with their medical history indicating that they were in palliative care, with a minimum age of 18 years, alert and understanding simple verbal commands.

Identification data were collected from the medical records, such as age, gender, medical diagnosis and comorbidities. In addition, the type of diet prescribed to the patient, length of hospital stay and whether the evolution was hospital discharge or death during hospitalization were also described. The diets were classified according to the hospital's standards, being: completely liquid, composed of liquid, nectar, honey and pudding consistencies; complete thick liquid, with honey and pudding consistencies; pasty, composed of liquid, nectar, honey, pudding and soft solid; mild and normal, with no consistency restrictions. The consistencies of liquid foods were classified according to the American Dietetic Association[9].

After collecting data from the medical records, a functional swallowing assessment was performed, according to the prescribed diet and according to the patient's conditions. Efficiency of bolus uptake, lip sealing, bolus preparation, slow or adequate oral transit time, presence or absence of extraoral leaks and residues in the oral cavity after swallowing were verified, in addition to clinical signs of laryngeal penetration and/or laryngo-tracheal aspiration, such as the presence of cough reflex, dyspnoea, "wet" or gurgly sounding voice, clearing throat and/or positive cervical auscultation[10]. In addition, after the clinical evaluation of swallowing, individuals were classified according to the Functional Oral Intake Scale (FOIS)[11], using the prescribed diet as a record. FOIS levels vary from 1 to 7, being: 1- nothing by mouth (NPO); 2 - dependent on alternative and minimal oral route of some food or liquid; 3 - dependent on an alternative route, with consistent food or liquid oral route; 4 - total oral route of a single food consistency; 5 - total oral route with multiple food consistencies, but with the need for special preparation or compensation; 6 - total oral route with multiple food consistencies, without the need for special preparation or compensation, but, with dietary restrictions; 7 - total oral route without restrictions.

The therapeutic intervention was carried out regarding the modification of the consistency and volume of food and liquids, as well as postural maneuvers to protect the airways, maneuvers for cleaning residues after swallowing, oromyofunctional exercises, vocal exercises and sensory stimulation. These were performed right after the evaluation, according to the needs of each patient[12]. The clinical/empirical effect of each technique on the participants' swallowing pathophysiology was investigated, immediately after its use by the speech-language pathologist. Such assessment was based on the observation of the permanence or not of the difficulties and/or signs suggestive of laryngeal penetration or laryngo-tracheal aspiration, prior to the use of the technique or maneuver.

The modification of the consistency of fine liquids and postural head maneuvers were indicated when there was oral incoordination or delay in the pharyngeal response, with risk of laryngo-tracheal aspiration[13]. Voluntary swallowing maneuvers were used in order to improve the oral propulsion of the food, or promote the cleaning of possible pharyngeal residues[14]. Sensory stimulation was performed when the patient presented delay or absence in the triggering of swallowing, in order to promote an increase in the pharyngeal response[15]. In addition, oromyofunctional and vocal exercises were also indicated, with the objective of improving propulsion of the food bolus, waste reduction and optimize the closure of the lower airway[16,17].

In a complementary way, in view of the patients' particularities and at their comfort, a brief questionnaire was applied with seven questions to be answered by the patient or a family's member (when the patient was unable to answer verbally). The questionnaire aimed to verify the satisfaction (or not) of patients with respect to food, or to food absence, in

order to observe their comfort regarding the conducts taken. The questions covered the topic of food and the incidence of pneumonia during hospitalization; if the patient felt hungry or thirsty; if discomfort was experienced during feeding or with food absence; if the patient had respiratory distress or dyspnoea during feeding and if he was satisfied with the food received during hospitalization.

The data were analyzed in a descriptive way, by obtaining the absolute and relative frequencies of the categorical variables and the measures of the numerical variables central tendency.

RESULTS

Twenty adults participated in the study, 13 males and 7 females with a mean age of 75.5 years (standard deviation = 14.43). The characterization of the sample, by means of diagnostics, did not obtain uniformity, as it was composed of different diseases and few individuals. The most frequent comorbidity was arterial hypertension (35%), followed by diabetes mellitus (15%), previous neurological event (15%) and chronic obstructive pulmonary disease (COPD) (10%). It was also observed that 25% of the sample was composed of ex-alcoholics and 20% ex-smokers (Table 1).

The average length of hospital stay for these patients was 15 days; after that period 55% died during hospitalization and 45% were discharged. The characterization of patients is described in Table 1.

The food consistencies most used for evaluation were liquid (55%) and honey (50%). Regarding changes in the swallowing oral phase, the prolonged oral transit time and residues in the oral cavity after swallowing were the only conditions observed in all the food consistencies. In Table 2, the individuals are presented according to the evaluated food consistencies and according to the changes observed in the oral phase of swallowing.

Table 1. Characterization of the study population according to diagnosis, comorbidities, length of hospital stay and hospital evolution (n=20)

Individuals	Age	Diagnosis	Comorbidities	Length of hospital stay (days)	Death or hospital discharge
1	68	Lung Neoplasm	COPD, ex-smoker	25	Death
2	72	Stroke	SAH, DM2, Cirrose, ex-alcoholic	16	Death
3	57	Pulmonary sepsis	Ex-alcoholic	27	Death
4	62	Uterine CA	-	18	Death
5	76	Colon CA	Hypothyroidism	89	Hospital discharge
6	87	CRF	SAH, AMI	11	Hospital discharge
7	81	Vascular dementia	Sroke	19	Death
8	77	Stroke	SAH, DM, CHF, COPD, ex-smoker	13	Hospital discharge
9	80	Exacerbated COPD	SAH	12	Death
10	58	Pulmonary fibrosis	-	13	Hospital discharge
11	82	Respiratory failure	Decompensated CHF	7	Hospital discharge
12	91	PNM, UTI	TBI for 30 years	20	Death
13	84	Autoimmune hepatitis	Dehydration, ex-smoker	14	Death
14	82	Atrial fibrillation and UGIB	SAH	11	Hospital discharge
15	74	Alcoholic liver cirrhosis	Ex-alcoholic	11	Hospital discharge
16	70	CHF decompensated and acute CRI	SAH, DM2, ex-alcoholic	11	Hospital discharge
17	36	Advanced biliopancreatic neoplasm, PNM, UTI	-	5	Death
18	97	UGIB, UTI	SAH	3	Hospital discharge
19	95	Respiratory failure	Dementia, severe hearing loss and amaurosis	16	Death
20	82	Exacerbated COPD	Intestinal CA, ex-smoker, ex-alcoholic	18	Death

Subtitle: n = number of subjects; COPD = Chronic Obstructive Pulmonary Disease; SAH = Systemic Arterial Hypertension; DM2 = Type 2 Diabetes Mellitus; CA = Cancer; CRF = Chronic Kidney Failure; AMI = Acute Myocardial Infarction; DM = Diabetes Mellitus; CHF = Chronic Heart Failure; PNM = Pneumonia; UTI = Urinary Tract Infection; TBI = Traumatic Brain Injury; UGIB = Upper Gastrointestinal Bleeding

Table 2. Description of changes in the oral phase of swallowing found from the clinical evaluation of swallowing, according to the population's food consistencies (n=19)

Oral phase	Liquid (n=11) n (%)	Nectar (n=3) n (%)	Honey (n=10) n (%)	Pudding (n=8) n (%)	Solid (n=4) n (%)
Inefficient bolus capture	1 (9)	1 (33)	2 (20)	1 (12)	0 (0)
Inefficient lip sealing	0 (0)	1 (33)	2 (20)	1 (12)	0 (0)
Inefficient bolus preparation	0 (0)	1 (33)	2 (20)	2 (25)	1 (25)
Extraoral leaking	0 (0)	1 (33)	2 (20)	2 (25)	0 (0)
Increased oral transit time	1 (9)	2 (66)	2 (20)	2 (25)	2 (50)
Residues in oral cavity after swallowing	1 (9)	1 (33)	2 (20)	2 (25)	2 (50)

Subtitle: n = number of subjects; % = percentage

Regarding the clinical signs of laryngeal penetration and/or laryngo-tracheal aspiration found in the respective consistencies, the same individual may have presented more than one sign of aspiration in the clinical evaluation. The sign common to all consistencies was the "wet" or gurgly sounding voice after swallowing (Table 3).

Out of the 20 individuals included in the investigation, 85% were fed exclusively by oral route, 10% by nasoenteral tube (NET) associated with the oral route and 5% by exclusive NET. Regarding FOIS, 10% were classified as level 6 (oral route with multiple consistencies without special preparation; 50% as level 5 (oral route with multiple consistencies and special preparation); 25% as level 4 (oral route with single consistency); 10% as level 2 (alternative route and minimal oral route) and 5% as level 1 (nothing by mouth) (Table 4).

Based on the literature quoted above, the most used therapeutic interventions by the speech-language therapy team to eliminate or minimize swallowing alterations in the study population, were: consistency modification (55%), multiple swallowing (45%) and effortful swallow (15%). Only 20% of the investigation subjects underwent sensory stimulation. Empirically, immediate positive effects were observed (Figure 1), such as reduced residues and reduced clinical signs of laryngeal penetration and/or laryngo-tracheal aspiration and reduced time for triggering the pharyngeal phase of swallowing, during its functional evaluation, with the use of the therapeutic strategy of choice. In addition, 30% performed oromiofunctional exercises for mobility and tongue force and/or vocal techniques for elevation/anteriorization/laryngeal stabilization and glottic coaptation, as a therapeutic intervention.

Using the satisfaction questionnaire, it was possible to identify that no individual developed pneumonia during hospitalization; 95% were satisfied with the diet that was served, including the 10% patients who used NET and minimal associated oral route;

Table 3. Description of the clinical signs of laryngeal penetration and/or laryngo-tracheal aspiration observed during clinical swallowing assessment, according to the population's dietary consistencies (n=19)

Aspiration clinical signs / No. patients who were assessed for each consistency	Liquid n=11 n (%)	Nectar n=3 n (%)	Honey n=10 n (%)	Pudding n=8 n (%)	Solid n=4 n (%)
Cough reflex	2 (18)	2 (66)	1 (10)	0 (0)	0 (0)
Dyspnea	2 (18)	0 (0)	0 (0)	0 (0)	0 (0)
" Wet " voice	1 (9)	2 (66)	2 (20)	1 (12)	1 (25)
Throat clearing	0 (0)	1 (33)	1 (10)	1 (12)	0 (0)
Discomfort	2 (18)	0 (0)	0 (0)	0 (0)	0 (0)
Cervical auscultation	2 (18)	1 (33)	1 (10)	0 (0)	0 (0)

Subtitle: n = number of subjects; % = percentage

Table 4. Characterization of the study population, according to the dietary consistencies of the diet prescribed during hospitalization, use of a tube, classification on the Functional Oral Intake Scale (n=20)

Individuals	Consistency of the prescribed oral diet	NET	FOIS
1	L, N, H and P	N	5
2	0	S	1
3	H and P 2x per day	S	2
4	L, N, H, P and SM	N	5
5	H and P	S	2
6	L, N and H	N	5
7	H and P	N	4
8	L, N, H and P	N	5
9	H and P	N	4
10	L, N, H, P and S	N	6
11	L, N, H, P and S	N	6
12	H and P	N	4
13	H and P	N	4
14	L, N, H and P	N	5
15	L, N, H and P	N	5
16	L, N, H and P	N	5
17	L, N, H, and SS	N	5
18	L, N, H and P	N	5
19	H and P	N	4
20	L, N, H and P	N	5

Subtitle: n = number of subjects; NET = Nasoenteral Tube; FOIS= Functional Oral Intake Scale; L = Liquid; N = Nectar; H = Honey; P = Pudding; SS = Soft Solid; S = Solid

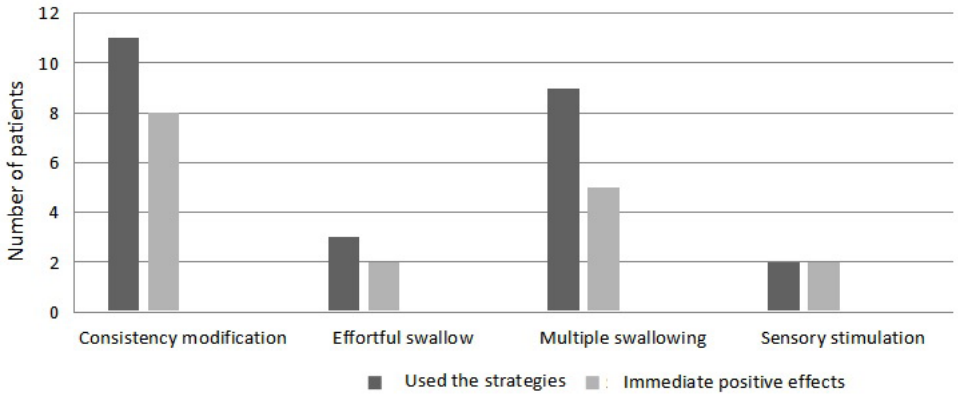

Figure 1. List of therapeutic techniques used to minimize the changes observed in the clinical evaluation of swallowing (n=20)

70% reported hunger (all of whom were fed orally); the 15% patients who had a NET in place claimed not to be hungry; 60% reported thirst, including the 10% who used a NET. Out of those who were fed orally, 15% reported discomfort in the absence of food and 10%, respiratory distress during food intake.

DISCUSSION

This study aimed to characterize the speech therapy work with patients in palliative care, given the scarcity of studies about this subject. From the clinical evaluation of swallowing, it was possible to observe a higher frequency of signs of penetration and/or laryngo-tracheal aspiration for liquid and nectar consistencies. For the more viscous and solid consistencies, it was possible to identify a greater presence of changes in the oral phase of swallowing.

A study carried out with elderly people with dementia, admitted to the geriatric clinic of a hospital, investigated whether the swallowing characteristics varied according to food consistencies. In agreement with the results of this study, the authors found a higher incidence of signs of laryngeal penetration and/or laryngo-tracheal aspiration for water and greater latency for the triggering of the first swallow for apple puree[18].

Physiologically, the liquid consistency requires greater agility and effectiveness in laryngeal closure, in addition to greater oral motor control, than the thickened liquid. In contrast, chewing, oral manipulation and solid ejection require greater muscle strength and greater muscle energy. Similar to solid, ejection of more viscous foods also requires greater muscle strength than less thick consistencies[18].

The Palliative Care Manual of the *Academia Nacional de Cuidados Paliativos* (ANCP, National Academy of Palliative Care) suggests that the speech-language therapist should safely manage oral feeding by means of maneuvers, consistency adjustment and fractionation of meals, in order to preserve quality[5]. Following the manual, in this investigation the majority of individuals (50%) was fed orally with multiple food consistencies and special preparation (level 5 in FOIS), predominantly with liquid, nectar, honey and pudding consistency diets, using maneuvers, such as multiple swallowing and effortful swallow. Due to the fact that the sample was composed of elderly patients, with multiple comorbidities and some with neurological impairment, more complex maneuvers or very different from the usual way of eating, that is, difficult to be performed, were not indicated, thus avoiding tiredness or discomfort.

In a literature review on the therapeutic approach in dysphagic patients with Alzheimer's disease, it was found that modifying the volume and consistency of food is the most commonly used technique in neurological patients, producing an important therapeutic effect on the efficacy and safety of swallowing, with decreased penetrations and aspirations. According to the authors, the prevalence of fluid aspiration decreased significantly when thickened, being a highly effective strategy, as it does not require cognitive integrity. It is also noted that the diet modification technique is indicated to avoid asphyxia due to inefficient oral food preparation, which can be used at a time when the disease progresses, but must be performed together with a team of nutritionists, as it can decrease the individual's caloric and proteic intake[19].

In the present study, only three patients used a NET. Only one used it exclusively, and the other two used the NET with associated minimal oral route. This finding is related to the fact that, in palliative care, invasive measures should be avoided and the indication of an alternative feeding route (AFR) should be considered.

When dysphagia worsens and the symptoms become more serious, transforming the oral route into a risk to the patient, it is suggested, in some cases, to establish an alternative feeding route. In individuals in palliative care, it is emphasized that these possibilities should be implemented only when they aim at ensuring comfort and quality of life, relieving symptoms and mitigating the suffering of patients and their family[5]. The debate about the alternative way of feeding older people with advanced dementia is still controversial. Most professionals believe that AFR would be the best option for patients with dementia, although there is evidence in the literature that the damages caused by alternative feeding outweigh the benefits[20-22].

In clinical practice, the decision must be made as a team, respecting the choice of the patient and family; these are considerations that must also be evaluated in other chronic diseases, on a case-by-case basis. Other studies reported that the introduction of an alternative feeding route in palliative care should be rethought, since, at this stage, the objective of nutritional adequacy does not exist anymore and that, despite reducing the chances of laryngo-tracheal penetration and/or aspiration, the NET will not prevent aspiration pneumonia[23-25].

In the present study, a small portion of the patients in the sample performed exercises to improve the swallowing function. It can be thus inferred that the decision for exercises was taken considering that, in palliative care, the indication of these therapeutic techniques should be implemented carefully, in order not to be a measure that increases energy expenditure and that may cause some kind of discomfort. Considering that 55% of the individuals in this study died, it is assumed that the majority already had a terminal prognosis. In line with the literature, the objective of the speech-language therapist, at this stage, is not to rehabilitate the swallowing process, but to keep the oral route as pleasant and as safe as possible, through conducts that minimize the risk of aspiration[5,26].

In most cases in which maneuvers and tactile-thermal stimulation were used, there was a decrease in changes in the oral phase and in the clinical signs of laryngeal penetration and/or laryngo-tracheal aspiration. In a literature review with dysphagic patients with Alzheimer's disease[19], it was found that, besides the change in bolus consistency and volume, effective therapeutic measures in the treatment of this population included postural maneuvers, which tend to decrease the incidence of aspiration. In addition, tactile and thermal sensory stimuli assist the triggering of swallowing and can reduce aspirations. Oral motor exercises can provide changes in the swallowing physiology. Specific swallowing maneuvers, which aim to compensate for biomechanical changes, besides adjunctive therapy with transcutaneous electrostimulation, were also mentioned in the referred literature review. Despite the strategies described above, there is little scientific evidence and important gaps still remain regarding the clinical management of swallowing in Alzheimer's disease, which will require further investigation[19].

Through the satisfaction questionnaire applied in the present study, it was possible to verify that most patients were satisfied with the food served in the hospital, even with the consistency adaptations suggested by the speech therapist. In addition to the biological character, food has a social and symbolic-cultural function, with great relevance in society[5]. The American Dietetic Association reports that, in patients under palliative care, eating should provide pleasure, decrease anxiety and increase self-esteem, as well as ensure greater interaction and communication with family members[27]. A qualitative study with 22 patients (in palliative care for different neurodegenerative diseases) and their relevant caregivers showed a negative impact on the daily life of the patient and caregiver, due to swallowing difficulties, which caused especially an increase in feeding time and/or significant difficulty in oral food intake[28].

Still based on the satisfaction questionnaire, 60% and 70% of the patients reported feeling thirst and hunger, respectively. However, during functional swallowing assessments, low food acceptance was often observed, as patients claimed not to be hungry.

One study, which aimed to determine the incidence of swallowing changes in patients under palliative care in the last 72 hours of life, demonstrated a higher rate of swallowing changes and reduced food acceptance[29]. As it is a sample mainly composed of terminally ill patients, it is believed that the low acceptance of food, despite the claims of hunger and thirst reported in the present study, is due to such patients' status.

In this study, it was also observed family members' insistence that the patient accept the diet. When asked about this attitude, many said that food was necessary to keep the individual strong and not let him die of hunger or thirst. In a survey carried out with oncological individuals in palliative care, interviews with patients and caregivers about senses and meanings of food and nutrition were conducted. The respondents reported that patients had to eat to stay alive, even without any food interest[30].

It is noteworthy that this study had limitations regarding the small sample size and the very heterogeneous population, since it was conducted in a general hospital. It is suggested that further investigations be carried out in the field of Speech-Language Therapy and palliative care, in order to enhance the scientific evidence that serves as a basis for clinicians.

CONCLUSION

The most frequently found changes, related to swallowing, were clinical signs suggestive of lower airway permeation (laryngeal penetration and/or laryngo-tracheal aspiration), mainly for liquids, and changes in the oral phase of swallowing for solid diets.

The main speech-language therapy interventions were adjustments in the consistency of the prescribed diets during hospitalization and guidelines for maneuvers for multiple swallowing and effortful swallow. Most patients continued, throughout the hospital stay, with oral feeding, in compliance with the wishes of the patients and their family, maintaining feeding a pleasant process.

It should be noted that caution is necessary when making generalizations from the results and conclusions of this study, since a small and heterogeneous number of participants was involved.

REFERENCES

1. WHO: World Health Organization. WHO definition of palliative care [Internet]. Genebra: WHO; 2019 [citado em 2019 Out 29]. Disponível em: https://www.who.int/cancer/palliative/definition/en/
2. Cardoso DH, Muniz RM, Schwartz E, Arrieira ICO. Cuidados paliativos na assistência hospitalar: a vivência de uma equipe multiprofissional. Texto Contexto Enferm. 2013;22(4):1134-41. http://dx.doi.org/10.1590/S0104-07072013000400032.
3. Queiroz RB, Zaccara AAL 2nd, Moreira MADM 3rd, Silva LM, Costa SFG, Silva AO. Cuidados paliativos e Alzheimer: concepções de neurologistas. Rev Enferm UERJ. 2014;22(5):686-92.
4. Donner MW, Jones B. Dysphagia [Editorial]. Dysphagia. 1986 Mar;1(1):1-2. http://dx.doi.org/10.1007/BF02503455.
5. Inaoka C, Albuquerque C. Efetividade da intervenção fonoaudiológica na progressão da alimentação via oral em pacientes com disfagia orofaríngea pós AVE. CEFAC. 2014;16(1):187-96. http://dx.doi.org/10.1590/1982-0216201413112.
6. Gallagher R. Swallowing difficulties: a prognostic signpost. Can Fam Physician. 2011;57(12):1407-9, e465-7. PMid:22170194.
7. Pinto AC. O papel do fonoaudiólogo na equipe. In: Carvalho RT, Parsons HA, organizadores. Manual de cuidados paliativos. São Paulo: Academia Nacional de Cuidados Paliativos; 2012. p. 358-63.
8. Calheiros AS, Albuquerque CL. A vivência da fonoaudiologia na equipe de cuidados paliativos de um Hospital Universitário do Rio de Janeiro. Rev Hosp Univ Pedro Ernesto. 2012;11(2):94-8.

9. ADA: American Dietetic Association. National dysphagia diet: standardization for optimal care. Chicago: ADA; 2002.

10. Caviedes IR, Lavados PM, Hoppe AJ, López MA. Nasolaryngoscopic validation of a set of clinical predictors of aspiration in a critical care setting. J Bronchology Interv Pulmonol. 2010;17(1):33-8. http://dx.doi.org/10.1097/LBR.0b013e3181cc49d1. PMid:23168657.

11. Crary MA, Mann GDC, Groher ME. Initial psychometric assessment of a functional oral intake scale for dysphagia in stroke patients. Arch Phys Med Rehabil. 2005;86(8):1516-20. http://dx.doi.org/10.1016/j.apmr.2004.11.049. PMid:16084801.

12. Silva RG, Luchesi KF, Furkim AM. Programas de intervenção fonoaudiológica para disfagia orofaríngea neurogênica em adultos. In: Dedivitis RA, Santoro PP, Sugueno LA, editores. Manual prático de disfagia e tratamento. Rio de Janeiro: Revinter; 2017. p. 213-22.

13. Bülow M, Olsson R, Ekberg O. Videoradiographic analysis of how carbonated thin liquids and thickened loquids affect the physiology of swallowing in subjects with aspiration on thin liquids. Acta Radiol. 2003 Jul;44(4):366-72. http://dx.doi.org/10.1034/j.1600-0455.2003.00100.x. PMid:12846685.

14. Bülow M, Olsson R, Ekberg O. Videomanometric analysis of supraglottic swallow, effortful swallow, and chin tuck in patients with pharyngeal dysfunction. Dysphagia. 2001;16(3):190-5. http://dx.doi.org/10.1007/s00455-001-0065-9. PMid:11453566.

15. Sciortino K, Liss JM, Case JL, Gerritsen KG, Katz RC. Effects of mechanical, cold, gustatory, and combined stimulation to the human anterior faucial pillars. Dysphagia. 2003;18(1):16-26. http://dx.doi.org/10.1007/s00455-002-0076-1. PMid:12497192.

16. Steele CM, Bayley MT, Peladeau-Pigeon M, Nagy A, Namasivayam AM, Stokely SL, et al. A randomized trial comparing two tongue-pressure resistance training protocols for post-stroke. Dysphagia. 2016 Jun;31(3):452-61. http://dx.doi.org/10.1007/s00455-016-9699-5. PMid:26936446.

17. El Sharkawi A, Ramig L, Logemann JA, Pauloski BR, Rademaker AW, Smith CH, et al. Swallowing and voice effects of lee silverman voice treatment (LSVT®): a pilot study. J Neurol Neurosurg Psychiatry. 2002 Jan;72(1):31-6. http://dx.doi.org/10.1136/jnnp.72.1.31. PMid:11784821.

18. Rösler A, Pfeil S, Lessmann H, Höder J, Befahr A, von Renteln-Kruse W. Dysphagia in dementia: influence of dementia severity and food texture on the prevalence of aspiration and latency to swallow in hospitalized geriatric patients. J Am Med Dir Assoc. 2015;16(8):697-701. http://dx.doi.org/10.1016/j.jamda.2015.03.020. PMid:25933727.

19. Baena González M, Molina Recio G. Abordaje de la disfagia en enfermos de alzhéimer. Nutr Hosp. 2016;33(3):739-48. http://dx.doi.org/10.20960/nh.286. PMid:27513513.

20. Goldberg L, Altman K. The role of gastrostomy tube placement in advanced dementia with dysphagia: a critical review. Clin Interv Aging. 2014;9:1733-9. http://dx.doi.org/10.2147/CIA.S53153. PMid:25342891.

21. Douglas JW, Lawrence JC, Turner LW. Social ecological perspectives of tube-feeding older adults with advanced dementia: a systematic literature review. J Nutr Gerontol Geriatr. 2017;36(1):1-17. http://dx.doi.org/10.1080/21551197.2016.1277174. PMid:28140779.

22. American Geriatrics Society Ethics Committee and Clinical Practice and Models of Care Committee. American Geriatrics Society feeding tubes in advanced dementia position statement. J Am Geriatr Soc. 2014;62(8):1590-3. http://dx.doi.org/10.1111/jgs.12924. PMid:25039796.

23. Morais SR, Bezerra AN, Carvalho NS, Viana ACC. Nutrition, quality of life and palliative care: integrative review. Rev Dor. 2016;17(2):136-40. http://dx.doi.org/10.5935/1806-0013.20160031.

24. Castro JMF, Frangella VS, Hamada MT. Consensos e dissensos na indicação e continuidade da terapia nutricional enteral nos cuidados paliativos de pacientes com doenças crônicas não transmissíveis. ABCS Health Sci. 2017;42(1):55-9. http://dx.doi.org/10.7322/abcshs.v42i1.951.

25. Peck A, Cohen CE, Mulvihill MN. Long-term enteral feeding of aged demented nursing home patients. J Am Geriatr Soc. 1990 Nov;38(11):1195-8. http://dx.doi.org/10.1111/j.1532-5415.1990.tb01498.x. PMid:2123217.

26. Carro CZ, Moreti F, Pereira JMM. Proposta de atuação da Fonoaudiologia nos Cuidados Paliativos em pacientes oncológicos hospitalizados. Distúrb Comun. 2017;29(1):178-84. http://dx.doi.org/10.23925/2176-2724.2017v29i1p178-184.

27. ADA: American Dietetic Association. Position of the American Dietetic Association: issues in feeding the terminally ill adult. J Am Diet Assoc. 1992;92(8):996-1002. PMid:1640049.

28. Veronese S, Gallo G, Valle A, Cugno C, Chiò A, Calvo A, et al. The palliative care needs of people severely affected by neurodegenerative disorders: a qualitative study. Prog Palliat Care. 2017;23(6):331-42. http://dx.doi.org/10.1179/1743291X15Y.0000000007.

29. Bogaardt H, Veerbeek L, Kelly K, Van der Heide A, van Zuylen L, Speyer R. Swallowing problems at the end of the palliative phase: incidence and severity in 164 unsedated patients. Dysphagia. 2015;30(2):145-51. http://dx.doi.org/10.1007/s00455-014-9590-1. PMid:25533181.

30. Costa MF, Soares JC. Alimentar e nutrir: sentidos e significados em cuidados paliativos oncológicos. Rev Bras Cancerol. 2016;62(3):215-24. http://dx.doi.org/10.32635/2176-9745.RBC.2016v62n3.163.