Available online at https://journal.rescollacomm.com/index.php/ijqrm/index

International Journal of Quantitative Research and Modeling

e-ISSN 2721-477X
p-ISSN 2722-5046

Vol. 4, No. 4, pp. 267-275, 2023

Oral Motor Exercise in Improving the Movements of The Jaw, Lip, Tongue in Case of Oral Phase Dysphagia on a Cerebral Palsy Patient

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Abstract

The dysphagia case in children with cerebral palsy is a disorder that must be treated immediately because it will have a serious impact on the child's health and speech fluency. The Oral motor exercise method is one of the therapies to improve jaw, neck, and tongue movements in patients with cerebral palsy. The purpose of this study was to investigate the oral motor exercise on a dysphagia patient of 3-years old with cerebral palsy disorder at Syamsudin SH Hospital, Sukabumi, from January to March 2019. This type of research is a descriptive quantitative method with single subject experiment. A research subject was a patient with cerebral palsy, a 3- years old – boy who has dysphagia. The patient cannot speak and only cries and says 'AAAA' if he wanted something and the patient was choking and coughing when eating or drinking. To deal with this problem, 20 sessions of therapy and 1 evaluation were carried out. The results showed that by comparing the results of the initial test and the final test, there was an increase in the ability to move the organs of the lips, tongue, jaw, and chewing movements of the patient. In the initial test, the patient got 2 points and the final test result. the patient got 4 points which indicated 50% success scale. From the therapeutic success scale obtained, it was concluded that the therapy was quite successful.

Keywords: Cerebral Palsy, Chewing movements, Dysphagia, Oral Motor Exercise

1. Introduction

A cerebral palsy is a group of permanent disorders of movement and posture, causing activity limitations associated with non-progressive disorders occurring in the developing fetus or infant. Cerebral palsy is basically a movement disorder. In contrast to the previous definition of cerebral palsy, put forward by the international working group for the lower limit of abnormalities that must be exceeded for the diagnosis of cerebral palsy, namely “activity limitation”. Cerebral palsy consists of several conditions, namely, the location of the lesion is in the brain, the lesion is permanent and non-progressive although the clinical picture often changes, the clinical picture is dominated by movement disorders and posters and impaired patient's ability to use his muscles consciously. Abnormal motor tone or movement in the first few weeks or months after birth may improve gradually until cerebral palsy disappears and may continue after the first year (Miller & Bachrach, 2017).

Cerebral Palsy is a motor disorder due to non-progressive brain damage that occurs during a child's development. May be related to co-morbidities such as malnutrition (46% - 90% of patients), growth retardation, mental retardation, epileptic seizures, communication disorders, visual and hearing defects, and gastrointestinal symptoms, such as dysphagia, and constipation (Miller & Bachrach, 2017).

One of the disorders on cerebral palsy children is Dysphagia, Dysphagia in children is a disorder that is often found. Several groups of infants and children with developmental disorders and/or certain medical conditions are at risk of developing dysphagia. Pathological conditions involving anatomical sites that play a role in the swallowing process can negatively affect the coordination of the swallowing phases. This can cause symptoms of dysphagia or feeding difficulties which will have a bad impact if not handled optimally.

Dysphagia in children has increased in the last twenty years. This could be due to increased survival rates in children born prematurely, with low birth weight, and with complex medical conditions. In addition, it can be caused by an increase in the survival rate of children with cerebral palsy, or children with stunted development (global development delay) (Prasse & Kikano, 2009)

Abnormalities in the anatomical structure can have a negative impact on swallowing function in children which can eventually lead to dysphagia. Neurogenic dysphagia in children is mostly caused by neurological disorders such as

cerebral palsy. Mechanical dysphagia in children can be caused by hypertrophy of the tonsils and adenoids. Evaluation of swallowing function is carried out according to the maturity of the organs that play a role in swallowing function. Evaluation of swallowing function can determine the risk of penetration and aspiration of food into the airways as well as the right consistency of food for children.

Speech therapy science explained that many therapeutic methods are used to correct eating and drinking disorders in children, one of which is dysphagia. One of the methods used is the oral motor exercise method. Given this method, it is hoped that the patient will be able to increase muscle strength in the articulatory organs of the tongue, lips and jaw which are associated with eating and drinking and improve the ability to process chewing and swallowing when eating and drinking. Based on the description above, the author as a final year student and as a speech therapist candidate who is competent in dealing with disorders in the field of chewing wants to do a case study.The objective of this study was to give a report a case of oral dysphagia in a 3-years old -boy with cerebral palsy using Oral Exercise therapy at Syamsudin SH Hospital, Sukabumi, from January to March 2019.

2. Literature Review

Dysphagia comes from the Greek words 'dys' which means difficult and 'phagein' which means to eat. Dysphagia has many definitions but what is often used is difficulty moving food from the mouth into the stomach (Kojima et al., 2014). Dysphagia is difficulty in swallowing and may include inflammation, compression, paralysis, weakness or hypertonicity of the aesophagus (Nicolosi, 1989).

Swallowing is a mechanism for transporting liquid or solid substances from the oral cavity to the stomach through the pharynx and aesophagus. Swallowing is a sensorimotor process that involves coordination between the muscles around the mouth, tongue, pharynx, larynx and aesophagus. The swallowing process is divided into 3 phases, namely the oral preparation and transportation phase, the pharyngeal phase, and the oesophagal phase. The existence of functional disorders and the coordination of these elements can cause dysphagia (Miller & Bachrach., 2006). Miler said that In the oral preparation phase, the process of chewing and mixing food with saliva occurs so that a bolus is formed. During the chewing process, there is coordination between the lips, tongue, mandible, teeth, soft palate, and buccal muscles. Movement and position of food are maintained by the tongue in an anterolateral position to the hard palate

The oral transport phase is the phase of transferring the food bolus formed during the oral preparation phase from the mouth to the pharynx. The food bolus is placed in the middle of the tongue, the pharyngeal cavity is exposed by elevation of the soft palate and lowering of the posterior portion of the tongue. The bolus is then pushed posteriorly (pharynx) and a simultaneous elevation of the tongue moves anteriorly to posteriorly. These movements trigger a pharyngeal reflex as the bolus enters the pharynx. This phase requires tightness of the lips to prevent leakage of food from the mouth and pressure of the buccal muscles to prevent food from entering between the mandible and the buccal.

The pharyngeal phase begins when the bolus of food hits the anterior pharyngeal arches (palatoglossal arches) and a swallowing reflex occurs immediately. A high-viscosity bolus slows down the pharyngeal phase, increases the peristaltic wave time, and prolongs the opening time of the upper oesophagal sphincter. The increased volume of the bolus results in a faster time for movement of the base of the tongue, movement of the soft palate and movement of the larynx and the opening of the upper oesophagal sphincter. Pharyngeal transit time increases with age

The oesophagal phase takes place unconsciously or reflexively. This phase begins with the occurrence of relaxation m. Cricopharynx. Primary peristaltic waves occur due to the contraction of the longitudinal and circular muscles of the proximal esophageal wall. The peristaltic movement of the middle part of the oesophagus is influenced by the myenteric plexus nerve fibres which are located between the longitudinal and circular muscles of the esophagus wall and these waves continue to move regularly to the distal oesophagus. Oesophagal transit time increases with age as a result of reduced muscle tone in the oral cavity to stimulate primary peristaltic waves.

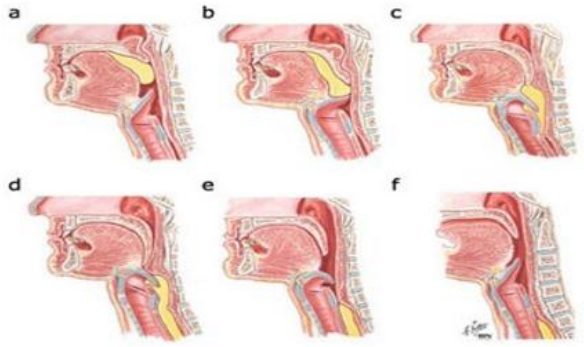

Figure 1: Swallowing phases. a: oral phase, b-c: pharyngeal phase, d-f: esophageal phase.

The most common causes of dysphagia were cerebral palsy (6 children), global delay development (3 children), encephalopathy (2 children), and other causes in as many as 8 children in the form of agenesis of the corpus callosum, hypotonia, pneumonia, hygroma coli, and laryngomalacia.

There are many eating problems in children with cerebral palsy. A significant decrease in nutritional intake mainly comes from oropharyngeal incoordination, which has something to do with slow eating speed, long eating times, excessive food accumulation and endangering swallowing safety. In addition to oropharyngeal incoordination, vomiting, poor teeth, early satiety, impaired communication and behavioural disturbances all contribute to malnutrition, which is characteristic of many children with severe cerebral palsy.

Cerebral palsy is a neurological condition caused by injury, occurring before the brain is fully developed. Cerebral palsy can be caused by brain injury that occurs during prenatal, perinatal, and postnatal.

Some children with hemiplegic cerebral palsy develop periventricular atrophy, indicating white matter abnormalities. Patients with cerebral palsy who have symptoms of quadriplegia, and motor disturbances that occur in the feet can occur the same to be more severe than in the hands. Cerebral palsy with coreoathetoid which sometimes has spasticity tends to occur in babies who are at term, dystonia of the extremities also often occurs with specificity but tends not to be recognized. Hypotonus that persists in cerebral palsy indicates involvement of the cerebellar pathway

Periventricular leukomalacia is the term for the characteristic coagulative necrotic lesions of the white matter adjacent to the lateral ventricles, which using ultrasound scans look for signs of trauma to the white matter virtually such as either hyperechoic or hypoechoic areas. In general, hyperechoic lesions indicate vascular congestion or haemorrhage and appear early in tissue destruction. Whereas hypoechoic lesions appear to reflect a loss of nephrotic tissue and the development of structures like cysts.

An international study recently created a new definition for cerebral palsy that is, cerebral palsy is a permanent disturbance in the development of movement and posture, hence causing activity restriction, which is related to a non-progressive disorder occurring in the developing fetus or infant. This definition allows for heterogeneity of clinical manifestations and emphasizes that disturbances of movement and posture due to disturbances in the brain are clinical mechanisms that cannot be changed. While abnormalities in the brain are considered permanent and non-progressive disorders

In clinical practice, the diagnosis of cerebral palsy is based on parental observations or reports of motor movements, such as sitting, pulling up, standing, walking, and evaluation of posture, deep tendon reflexes, and muscle tone. In addition to motor manifestations, children with cerebral palsy often exhibit cognitive and sensory, communication and behavioral disturbances, epilepsy, malnutrition and secondary musculoskeletal disorders. Except in mild cases, cerebral palsy has a large impact, on family welfare and public health care costs

Nutritional disorders in cerebral palsy patients, Calorie intake in children with cerebral palsy is lower than the surrounding children of the same age. The reason may be a change in the texture of food, as well as food that is not suitable for the patient's age. Some patients are dependent on parental or career food because of the inability to express hunger and thirst with hand and mouth movements. Children with cerebral palsy exhibit feeding problems due to effects on the anatomical and functional structures involved in the function of eating. Resulting in a reduction in energy and nutrient intake and consequently malnutrition. As a result of malnutrition, fat reserves in the body become depleted, reduced muscle mass, and immune dysfunction occurs, which results in the risk of respiratory infections.

One of the method to treat cerebral palsy children with dysphagia is Oral Motor Exercise. According to Debra C Gangale (1993), this method is a treatment to improve swallowing ability. This exercise is useful for patients who have oral and/or pharyngeal disorders due to reduced tongue mobility or oral sensation, reduced bolus manipulation or weakness and reduced jaw mobility. Applying the oral motor exercise. it is hoped that it can increase muscle strength in the organs of the lips, tongue and jaw which are related to the ability to chew, suck and swallow.

The author has not found research that reviews the use of oral motor exercise in treating dysphagia in children with cerebral palsy.

There was a research conducted by Lass & Pannbacker in 2008 discussed Non Speech Oral motor program was carried out passively with a dominant function of oral motors. The NSOMEs program is held 2 times a week with a duration of 1 hour per meeting. Implementation of the NSOMEs program includes massage, jaw exercise, lip closure, tongue elevation, and open close mouth. The evaluation results showed an increase in functional oral motor although not significant. Obstacles in compiling the NSOMEs program and the difficulties of parents running the NSOMEs program at home. The solution is the need for the creativity of a speech therapist to systematically compile the NSOMEs program and seek discussions with parents so that they can repeat therapy activities at home (Lass & Pannbacker, 2008).

3. Materials and Methods

The research design used was a a descriptive quantitative method with single-subject experiment. In a single-subject experiment, the subject or participant is single, it can be one person, two people or more. The single-subject name also derives from the way the experimental results are presented and analyzed by individual subject. The basic approach in single-subject experiments is to study individuals with no treatment and then with treatment and the effect on the effect variable is measured under both conditions.

The single-subject experimental design used is the A - B - A design, A is the symbol for baseline data while B is for treatment data.

In the baseline marked with the symbol A there is no treatment, which means it is an initial test. Then the subject was given treatment in the form of therapy activities. And the effect of giving the treatment is given the symbol B. Differences in activity, ability, knowledge between before being given treatment (base line A) and after being given treatment (treatment B) shows the effect of treatment. After treatment is followed by a state without treatment as in the previous state, or baseline A. The second baseline is intended to find out whether without treatment the activity will return to its initial state, or continue as in the state under treatment. This second baseline is the ultimate test. Then compare the results of both the initial test and the post-test on the basis of a causal relationship.

The research was conducted at Syamsudin Sh Hospital Medical Rehabilitation Installation, Sukabumi city for 2 months, January to March 2019. The research was carried out by applying understanding to patients who became research subject. He was dysphagia patient in the Medical Rehabilitation Installation of Syamsudin SH Sukabumi Hospital, A subject of study was a three years old boy who had a cerebral palsy disorder.

Table 1. Goals and daily therapy Program

Meeting	Objective	Program
1-20	patient is able to improve the ability to chew in the oral phase	1. Passive stimulation exercises with massage on the muscles of the oral motor organs 2. The steps: 3. Giving a touch to the left or right cheek area will turn the head towards the touch. usually looking for milk. 4. Massage 5. Passive Simulation 1. Massage the temporalis muscle with your fingers, rotating and vice versa. 2. Stretch the upper lip (lobe) using the forefinger and thumb. 3. Stretch the lower lip using the forefinger and thumb from the outside to the inside. 4. Place the therapist's index finger and thumb on the patient's chin. Massage in an outward direction following the jaw line and the mandibular joint. Massage outward following the jaw line of the mandibular joint. 5. Apply gentle pressure with the therapist's two fingers on the tomporo mandibular joint on each cheek of the patient while remaining relaxed. 6. Oral motor exercises a. Jaw exercises 7. Unscrew the jaws a. Tongue exercises 8. Tongue brushing a. Lip exercises 9. Pouting lips 10. Smiling.

The therapy method was applied to a patient of cerebal palsy is the oral motor exercise method which was popularized by Debra C. Gangale in her book entitled The Source For Oral-Facial Exercise (1993). This method is to improve the ability to function the muscles of the lips, tongue and jaw so that the patient is able to process the bolus properly.

Method steps

a. Passive stimulation:

1. Massage

a) Massage the temporalis muscle with your fingers, in a circular direction and vice ver

b). Stretch the upper lip using your forefinger and thumb

c) Stretch the bottom of the lips using the forefinger and thumb in a direction from outside to inside

d) Place the therapist's index finger and thumb on the patient's chin. Massage in an outward direction following the jaw line and the mandibular joint. Massage outward following the jaw line of the mandibular joint

e) Apply gentle pressure with two therapist fingers on the tomporo mandibular joint on each cheek of the patient while remaining relaxed

2. Brushing

a) Feel the repetitive movement of the inner cheek by rubbing the inner cheek in a downward direction, alternating between the right and left cheeks.
b) Moving the gums repeatedly
c) Moving the tongue repeatedly by rubbing the tongue using a brushing direction from the inside out..
d) Pressing the tip, middle, and inside of the tongue

Therapeutic Equipment:

a. Hand scoons
b. Baby oil
c. Brushing

Functions of Therapeutic Devices

a. Handscoon to prevent transmission of germs and to help during passive stimulation of patients.
b. Baby oil serves to help passive stimulation / massage and active stimulation.
c. Brushing serves to stimulate the tongue.

C. How to use therapeutic aids

a. Handscoon is used on the writer's hands when doing massage.
b. The baby oil is poured into the writer's palm until it is quite flat, and it is ready to massage the patient's face.
c. Brushing is used according to the existing steps

Table 2. Therapy implementation plan

Meeting	Stimulus	expected response
1-5	- The first 5 minutes, the author asks about the patient's news and invites the patient to pray.	- the patient answered with a smile
	- Approach first by explaining therapy material to the patient's parents 5 minutes before therapy	- Patients feel comfortable when approaching and the client's parents too and understand when therapy material is explained
	- 20 minutes the writer does passive stimulation to the patient in the form of doing passive stretch exercise -	- Patients feel comfortable and relaxed during passive stimulation / massage
	- 2 minutes the author takes a break -	Patients feel comfortable at rest and invite patients to chat.
	- 15 minutes the author does Tongue brushing	The patient feels comfortable and relaxed when passive stimulation of the tongue brushing is carried out
	- 3 minutes the author invites patients to pray after therapy.	Patients feel comfortable when asked to pray "Alhamdulillah
	- 5 minutes the author gives advice to patients and the patient's family.	The patient's parents feel comfortable when given advice.
	The first 6 - 10 - 5 minutes, the author asks about	the patient's condition and invites the patient to pray –
	- 5 minutes before therapy Approach first by explaining therapy material to the patient's parents. -	The patient answers with a smile
	- 20 minutes the writer does passive stimulation to the patient in the form of doing passive stretch exercise –	Patients feel comfortable at rest and invite patients to chat.
	- 2 minutes the author takes a break.	- Patients feel comfortable and relaxed when passive stimulation of tongue brushing is carried out
	- 15 minutes the author does Tongue brushing	Patients feel comfortable when asked

		to pray "Alhamdulillah -
	- 3 minutes the author invites patients to pray after therapy. - - 5 minutes the author gives advice to patients and the patient's family	- The patient's parents feel comfortable when giving advice. The patient answers with a smile
	The first 11 – 20 - 5 minutes, the author asks about the patient's condition and invites the patient to pray - 5 minutes before therapy Approach first by explaining today's therapy material to the patient's parents. –	Patients feel comfortable when approaching and the client's parents feel comfortable and understand when therapy material is explained
	- 20 minutes the writer does passive stimulation to the patient in the form of doing passive stretch exercise -	The patient feels comfortable and relaxed when passive stimulation/massage is done
	- 2 minutes the author takes a break. - Patients feel comfortable at rest and invite patients to chat.	Patients feel comfortable at rest and invite patients to chat.
	- 15 minutes the author does Tongue brushing –	Patients feel comfortable and relaxed when passive stimulation of tongue brushing is carried out
	t - 3 minutes the author invites patients to pray after therapy.	Patients feel comfortable when asked to pray "Alhamdulillah"
	- 5 minutes the author gives advice to patients and the patient's family	The patient's parents feel comfortable when giving advice.
	. 21 The author asks the patient to repeat the passive stimulation that was previously given by the author (evaluation)	The patient is able to repeat the passive stimulation given by the author

The author does to assess the success of short-term therapy is by comparing the initial test before therapy and the final test after therapy.The method of evaluation is by providing the same stimulus when carrying out the final test as when carrying out the initial test before therapy and then comparing the results of the initial test before therapy and the results of the final test after therapy.

The author uses 3 assessment classifications of patient responses, namely:

M = Able, if the patient can suck well with a duration < 6 seconds.

CM = Quite Able, if the patient can suck well with a duration of <3 seconds.

TM = Not able at all.

This research was conducted at Syamsudin SH Hospital Medical Rehabilitation Installation, Sukabumi city for 2 months, starting from January to March 2019. The research was carried out by applying understanding to patients who would be research subjects who were dysphagia patients at the Syamsudin Hospital Medical Rehabilitation Installation SH Sukabumi, In this study the authors use quantitative research, because the data obtained will be in the form of numbers and meet the causal requirements.

According to Sugiyono (2013: 224), data sources are subjects from which data can be obtained. In quantitative research, these activities are carried out consciously, directed and always aimed at obtaining the necessary information. Various data sources that will be utilized in this study are as follows:

a. Primary data

Primary data is data obtained directly from the source. Primary data sources used in this study include:

a) Results of interviews with patients.

b) Observation results to patients.

c) Test results of speech, language, voice, smooth rhythm, and swallowing to the patient.

d) Document study results in the form of a doctor's examination obtained from the patient.

b. Secondary data

Secondary data is data obtained not directly from the source. In this study, the secondary data sources used were written sources, namely the results of therapy in practicum II.

Data analysis technique

To assess the criteria for success of therapy, it can be seen from the results of the initial test before and after therapy, whether there is an increase of the ability to move the organs of the lips, tongue, and jaw.

To determine the increase in patient response comparison before and after therapy, the author used the following calculations:

Number of final tests – number of pre-tests

To assess the percentage scale of the initial test results, namely:

(preliminary test score)/(total number of items) x 100%

To assess the percentage scale of the final test results, namely:

(final test score)/ (total number of items) x 100%

To determine the scale of success, namely:

(final test result-preliminary test result)/(maximum score) x 100%

In determining the success criteria of short-term therapy seen from the increase in response in patients, including the Table 3:

Table 3. criteria of short-term therapy

Success Criteria			
No	Presantase	Point Increase	Value Criteria for success
1.	7-10 70%	-100%	Success
2.	4-6 40%-	60%	Fairly Successful
3.	0-3 0%-	30%	Unsuccessful

4. Results and Discussion

Based on the results of the Speech Tool Examination (intentional oral movement) which the author had carried out as many as 20 items, were unable to be carried out by the patient. Thus it is concluded that the structure of the client's speech organs was poor and Based on the results of the Speech Instrument Examination, the structure and function of the client's speech organs are ranked 1 and 3, It means Normal and mild deviation (possibility of affecting speech, experiencing abnormalities). And intentional oral movements can be done by the client well.

Based on the results of the Auditory Language Comprehension Test (PBSA), the patient has not been able to answer the 101 items and the patient did not understand the command.

a. Syndromes related to sound. The patient cannot be assessed for his voice because the patient can only cry and emit "aaaaaaa".

b. Syndromes associated with smooth rhythm. The client is unable to sing, tell stories and count.

c.Swallowing-related syndromes. The patient experienced choking or coughing when eating or drinking with all types of food and the patient could not chew food perfectly.

Based on the author's observations, the patient's physical condition is weak with all normal limbs. The patient experienced drolling, did not use hearing aids, did not use glasses and did not use walking aids.

a). Rough motoric. The patient is unable to walk or run.

b). Fine motor. The patient's fine motor skills are currently not able to grip firmly, not even able to pick up.

c). Visuomotor coordination. The patient is unable to button a shirt, tear up paper, put together a puzzle, draw and insert a straw into a bottle.

c. Sensory Ability. Sensory hearing, vision and tactile kinesthetic, as follows:

a). Hearing sensor (S1), the patient glances when his name is called.

b). Vision sensor (S2), the patient is able to see an object, the patient is able to move his eyes, hands and feet but is still weak / limp, when given a toy the patient does not respond.

c). Kinesthetic tactile sensor (S3), the client can feel touch, seen when the client is touched, looks in the direction that is touching or immediately moves his legs and arms.

d. Behavioral and Social, the patient is able to socialize with people in the home environment.

e. Impression of Intelligence, the patient looked incapacitated because the patient could not speak, did not understand orders, could not count, etc.

f. Dominant / lateralization (Dexterity Quotient)

Based on the results of observations and the Dexter Quotient, the authors did not see the lateralization performed by the patient with the conclusion that the EEG picture showed generalized cortical dysfunction in both hemispheres, with an area of epileptogenic potential in the left frontocentral with the conclusion that the EEG picture showed generalized cortical dysfunction in both hemispheres, with an area of epileptogenic potential in the left frontocentral

The results of interviews to the client's parents, obtained information that during pregnancy the client's mother had insomnia and went to a psychiatrist and was given sleeping pills by a psychiatrist. At that time, the mother did not know she was pregnant and was found out after 4 months of pregnancy, but the mother was still taking sleeping pills.

At 6 months of gestation, the mother took the womb to the doctor for an ultrasound, the obstetrician said that the mother's womb was weak and the fetus in her stomach was also experiencing drug poisoning. The client was born at

the midwife, the process of giving birth in a normal way KTIKA the client's mother's pregnancy was 9 months and 1 week. At the time of delivery the client immediately started crying and normal limbs with a weight of 34 kg and a height of 52 cm.

A week after birth the client did not cry and at the age of 3 months the client had a seizure for 5-15 minutes and was immediately taken to the hospital and diagnosed by an epilepsy doctor and given a seizure-reducing drug. Until now the client is still having seizures.

In 2015, a 3-month-old client had an EEG (Electroensephalography) examination at Syamsudin SH hospital with the conclusion that the EEG picture showed overall cortical dysfunction in both hemispheres, with an epileptogenic potential area in the left frontocentral.

According to interviews that the author conducted with the client's mother, if the client wanted something, he would express it by crying or whining.

Based on the speech examination test conducted by the author, the following data were obtained:

Table 4. Speech Instrument Examination

1	Lips	Symmetrical lip shape, no signs of cleft lip, lips cannot protrude, cannot be moved sideways (left & right) and jaw activity is not smooth	Level 1
2	Tooth	The shape of the teeth after occlusion looks normal, the relationship of the incisors from front to back looks normal, the patient does not use assistive devices.	Level 3
3	Tongue	The size of the tongue is sufficient, the tongue cannot bend up and down	Level 3
4	Palatum Durum	Stuktur langit-langit normal, artinya tidak terdapat *cleft* perbaikan maupun tidak perbaikan, tidak ada *fistula* di *palatum* dan keadaan lengkung *palatum* normal	Level 1
5		langit-langit lembut normal, tidak ada tanda-tanda mengalami perbaikan atau kelainan, dan uvula normal	Level 1
6		Structural fauces appear normal, but during phonation /a/ is absent.	Level 1
7		Nasal Cavities The structure of the septum looks normal, not tilted to the left or right. The patient was not mouth breathing and no adenoids were seen.	Level 1

Note:
Rank 1: Normal.
Rating 2: Mild, unlikely to affect speech
Rank 3: Moderate, likely to affect speech, experience abnormalities.
Rank 4: Severe, can inhibit normal speech production, structural changes need to be made, with tools, without speech therapy services

5. Conclusion

The application of the oral motor exercise method can increase the ability to move the organs of the lips, tongue and jaw in a dysphagia patient with cerebral palsy disorder. The author used passive stimulation in the form of upper lip stretch, sustained palm massage of cheeks, rocking palm cheek stretch, chin massage, jaw muscle massage, and tongue brushing with a duration of 45 minutes in each meeting, the frequency of therapy was 3 times a week and 20 times of therapy and once of evaluation.

The result of applying the oral motor exercise method was an increase 4 points, from the initial test results it is known that the patient gets 2 points and the final test results showed that the patient got 4 points. With details of 1 point increase in sucking reflex, 1 point increase in swallowing reflex, 1 point increase in lip closing reflex when food is introduced, and 1 point increase in tongue reflex when a taste sensation is given.

The increase was approximately 50% and based on the success scale of therapy, the increase in the ability to move the organs of the lips, tongue and jaw was declared quite successful. This was supported by a post-therapy statement questionnaire filled out by the patient's family which stated that the patient had progressed, namely that his tongue

was not stiff and was able to move food. families and patients are satisfied with the services and results of the therapy provided in 20 meetings.

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