

AIUEO THERAPY IN IMPROVING SPEECH ABILITY IN APHASIA WITH CEREBRAL INFARCTION AT CHUZAN HOSPITAL OKINAWA, JAPAN

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ABSTRACT

Cerebral infarction (ischemic stroke) is a condition when blood flow to the brain is obstructed, causing damage to brain tissue. Cerebral infarction is one of the most common cerebrovascular diseases and can result in severe residual functional disability that permanently affects the patient's activities of daily living and quality of life. One of them is aphasia or impaired language function. Elderly people with aphasia will be given AIUEO therapy which aims to improve speech so that spoken articulation is clear. This research aims to determine the effectiveness of applying AIUEO therapy in improving the speaking ability of aphasia patients. The type of research used in this case study is descriptive. AIUEO therapy for Mrs. E can improve verbal communication because the patient is able to express his wishes directly and does not use writing. The patient's speech can also sometimes be heard quite clearly. Evaluation of Mrs. E for 3 days shows an increase in the patient's communication after being given AIUEO therapy. There is an effect of AIUEO therapy on improving speaking ability.

Keywords: aphasia; aiueo therapy; cerebral infarction

INTRODUCTION

Cerebral infarction (ischemic stroke) is a condition when blood flow to the brain is obstructed, causing damage to brain tissue. Cerebral infarction is one of the most common cerebrovascular diseases and can result in severe residual functional disability that permanently affects the patient's activities of daily living and quality of life. (Pricylla, 2023). According to the World Health Organization, approximately six million people die from cerebrovascular disease worldwide each year, accounting for 11% of all deaths, making it the second leading cause of death. In Japan, cerebrovascular disease was a major cause of death in the past, but improvements in diet and lifestyle, as well as advances in diagnostic techniques and therapeutic methods, have led to a sharp decline in mortality rates. However, cerebrovascular disease is currently the fourth largest cause of death among Japanese society. Even today, cerebrovascular disease still occurs in more than 230,000 patients per year, and more than 1.15 million patients are receiving ongoing treatment. Currently, 6.5 million people require long-term care in Japan, and about 20% are due to cerebrovascular disease. Due to the increasing elderly population, the social impact of cerebrovascular disease will become increasingly significant.

With the large number of cerebral infarctions occurring, appropriate and immediate treatment is needed, as well as remembering the detrimental effects of cerebral infarction. The most common impacts or effects of cerebral infarction include paralysis of the limbs, visual disturbances, swallowing disorders, and speech disorders or aphasia (Pinzon, dkk (2010); Yusri, Zaki & Diyan (2022)). According to Sofiatun, elderly people who have difficulty speaking will be given AIUEO therapy which aims to improve speech so that the articulation that is spoken is clear so that it can be understood by the family and the surrounding environment because people who experience speech disorders or aphasia will experience failure in articulation.

METHOD

This research uses a descriptive research design. The sample in this study was 1 respondent, namely an elderly person aged 85 years. In this case study the data is presented textually with data that is in accordance with the facts and is narrative in nature. This research was conducted in March 2024.

RESULTS AND DISCUSSION

ASSESSMENT

Pengkajian merupakan tahap awal dari nursing process. All data is collected systematically and comprehensively regarding the patient's biological, psychological, social and spiritual aspects. This case study assessment includes: general data, main complaint, history of current illness, history of previous illness, family history of illness, psychosociospiritual assessment, focus assessment, and physical examination as supporting data.

NURSING DIAGNOSES

Nursing diagnosis is a clinical assessment of the client's response to the health problems or life processes they are experiencing, both actual and potential. Nursing diagnosis aims to identify the response of individual clients, families and communities to health-related situations (SDKI DPP PPNI Working Group Team, 2020). The nursing diagnosis that is the main focus in this case study is verbal communication disorders associated with decreased cerebral circulation characterized by aphasia.

INTERVENTIONS

Nursing planning or nursing intervention is the formulation of goals, actions and assessment of a series of nursing care for patients/clients based on assessment analysis so that the patient's health and nursing problems can be resolved. (Nurarif, Amin Huda & Kusuma, 2020).

IMPLEMENTATION

The implementation or execution stage is the fourth stage of the nursing process by carrying out various nursing strategies (nursing actions) that have been planned in the nursing action plan. At this stage, nurses must know various things including physical dangers and protection for clients, communication techniques, abilities in procedures, understanding of the patient's rights and understanding the patient's level of development.

EVALUATION

Evaluation is the final step in the nursing process by identifying the extent to which the goals of the nursing plan have been achieved or not. In carrying out evaluations, nurses should have the knowledge and ability to understand responses to nursing interventions, the ability to draw conclusions about the goals achieved and the ability to relate nursing actions to outcome criteria.

Assessment is the initial stage of the nursing process. All data is collected systematically and comprehensively regarding the patient's biological, psychological, social and spiritual aspects. Mrs. E complained of not being able to speak clearly and having difficulty standing. The patient does not seem to respond to what other people say, uses writing when he wants to talk, uses a wheelchair, experiences paralysis in the left limb. General condition of Mrs. E composmentis. Nursing diagnosis is a clinical assessment of the client's response to the health problems or life processes

they are experiencing, both actual and potential. Nursing diagnosis aims to identify the response of individual clients, families and communities to health-related situations (SDKI DPP PPNI Working Group Team, 2020). This case study shows that elderly people with cerebral infarction will experience problems with verbal communication disorders, this occurs due to damage to brain function so that the elderly experience aphasia or speech disorders. Nursing planning or nursing intervention is the formulation of goals, actions and assessment of a series of nursing care for patients/clients based on assessment analysis so that patient health and nursing problems can be resolved (Nurarif, Amin Huda & Kusuma, 2020). The main intervention Mrs. E, namely giving AIUEO therapy which is carried out 2 times a day for 3 consecutive days. AIUEO therapy is carried out at 09:15-09:45 JST and 13:15-13:45 JST. This therapy is carried out for 30 minutes. The effectiveness of AIUEO therapy has been proven to overcome the problem of verbal communication disorders.

The implementation or implementation stage is the fourth stage of the nursing process by carrying out various nursing strategies (nursing actions) that have been planned in the nursing action plan. The time recommended by (Djabar, et al., 2022) is that application is carried out 2 – 3 times a day for 3 consecutive. 5. Evaluation is the final step in the nursing process by identifying the extent to which the goals of the nursing plan have been achieved or not. Evaluation of progress on the third day with a nursing diagnosis of verbal communication disorders related to decreased cerebral circulation showed results (S) The patient said he wanted to go to the toilet, the patient said he wanted to read the newspaper, (O) only the word toilet was able to be said by the patient, when he wanted to read the newspaper the patient said said the newspaper while making body movements., (A) the problem of verbal communication disorders has not been resolved, (P) continue AIUEO therapy intervention.

CONCLUSION

Elderly people with a medical diagnosis of cerebral infarction will experience nursing problems with verbal communication disorders. Nursing diagnoses that emerge are impaired verbal communication related to decreased cerebral circulation, impaired physical mobility related to decreased muscle strength, and risk of ineffective tissue perfusion related to hypertension. The nursing plan provides AIUEO therapy actions. The effectiveness of AIUEO therapy for verbal communication disorders in cerebral infarction patients has been proven to be effective.

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