

NURSING CARE FOR DECUBITUS PREVENTION USING RANGE OF MOTION (ROM) IN PATIENTS WITH STROKE, AT IKEDAEN BYOING HOSPITAL, JAPAN

Yayuk Susianti*, Riani Pradara Jati

Sekolah Tinggi Ilmu Kesehatan Kendal, Jl. Laut No.31 Kendal Central Java 51311, Indonesia

*yayuk@stikeskendal.ac.id

ABSTRACT

Tissue damage due to pressure on soft tissue, decubitus often occurs in patients who are bedridden for long periods of time. One way to prevent pressure ulcers is by massaging using moisturizer such as pure coconut oil and doing Range Of Motion (ROM). This scientific research aims to determine the effectiveness of bed shifting or Range Of Motion (ROM) as an effort to prevent pressure ulcers. The ROM method is carried out 3 days in a row every 2 hours in the morning, afternoon, and evening. After implementing ROM (Range Of Motion) result obtained in these patients for 3 days periodically showed a reduction in complaints of pain when lying in bed. The ROM (Range of Motion) method has been proven to be effective in preventing pressure ulcers in stroke patient who are bedridden for a long time. The ROM (Range Of Motion) method is very effective in helping prevent decubitus in bed rest patients such as stroke.

Keywords: decubitus; range of motion; stroke

INTRODUCTION

In stroke patients, there will be disturbances in accessory function, nerves, thereby reducing motor and musculoskeletal function, therefore resulting in weakness in the limbs which leads to hemiparase which makes stroke patients have to rest in bed. Long enough, of course this will put continuous pressure on prominent areas such as the bones in the waist, and reduce blood flow which can reduce the adequate supply of nutrients and leukocytes. Causing tissue ischemia and infection. Cause disruption of skin tissue integrity, namely pressure sores or decubitus. (Kurniawan, 2021) The role of nurses in reducing decubitus is very important, because preventing the integrity of the patient's skin is one of the most important aspects in providing nursing care. Range Of Motion (ROM) management carried out to reduce prolonged pressure and frictional forces on the skin. According to research results from journals that researchers read, in Japan almost 30% of stroke sufferers suffer from decubitus. Risk factors for decubitus ulcers include mobility and activity, decreased sensation, dampness, harmful forces, friction, diet, age, decreased arteriolar pressure, psychological stress, smoking, and skin temperature.

METHOD

In this study, the Range Of Motion (ROM) training method was used. Range Of Motin (ROM) is an exercise carried out to naubtaib or improve the level of perfection of the ability to move joints normally and completely to increase muscle mass and muscle tone (Potter & Perry, 2005)

RESULTS AND DISCUSSION

After carrying out the Range of Motion (ROM) exercise for 3 days periodically every 2 hours, it was obtained:

1. On the first day, the patient said his back felt hot when he slept on his back.
2. On the second day, the patient said that his condition had not improved, the skin color on the patient's lower back was reddish.

3. On the third day, the patient said that the back area no longer felt ht when sleeping on his back, and the redness was no longer visible.

The evaluation results of giving ROM (Range Of Motion) to these patients for 3 days periodically showed a reduction in complaints of pain when lying in bed. After teaching the patient ROM (Range O Motion) can do it alone even though the movements are a little careful. The redness found in the patient's lower back had returned to normal after 3 days of intervention. According t researchers, after carrying out ROM (Range Of Motion) exercises for 3 days for 10 hours a day with a requency of once every 2 hours for 15 minutes, it can effectively have an effect on the redness of the patient's lower back.

Stroke can occur due to rupture of blood vessels in the brain and blood clots due to thrombosis resulting in cerebral hemorrhage and blockage of blood vessels in the brain causing a decrease in blood supply to the brain, this will reduce oxygen supply to the brain, resulting in ischemia of brain tissue and diffusion. brain tissue. In accordance with research by Ginting & Putri (2021) which states that patients who are unable to change positions independently are at high risk of decubitus. The patient can feel pressure, but is unable to change position independently to relieve the pressure. This increases the chance of decubitus occurring.

Pathophysiology of Pressure Ulcers

Pressure

Pressure ulcers are the result of prolonged pressure on a prominent bone surface area and result in reduced blood circulation to the pressure area and over time the local tissue becomes ischemic, lacks oxygen and develops necrosis. Normal pressure in the capillaries is 32mmHg. If capillary pressure exceeds blood pressure and the structure of the skin's blood vessels, collapse will occur. With an increase in the number of capillary arteries, fluid shifts towards the capillaries which will cause edema to appear and as a result autolysis will occur. The location of the pressure is a factor that can worsen the patient's condition, bony prominences with a thin layer of skin such as the coccyx, spinous processes, heels, ankles and elbows.

Friction

Continuous friction between the patient's skin and surfaces such as sheets, beds, wheelchairs, etc. can cause damage to the patient's skin. The possibility of injury is in the form of scratches, abrasions, or wounds on the patient's sensitive skin. When skin integrity is compromised, transepidermal water loss will increase, thereby increasing moisture in the area around the disturbed skin. Increased humidity This will increase the friction force on the skin, causing decubitus wounds.

Humidity

The presence of moisture on the skin and its duration increases the risk of damage to skin integrity. Due to humidity, the risk of developing bedsores increases fivefold. Humidity reduces the skin's resistance to other physical factors such as pressure or friction. Patients who cannot move independently and depend on nurses to keep the patient's skin dry and intact. For this review the nurse must include hygiene in the care plan.

Malnutrition

Protein and energy malnutrition can reduce fibroblast cellular activity and slow down angiogenesis during the proliferation phase, thereby reducing collagen synthesis. This will then cause the ulcer to continue to open. Nutrition is one of the clinical guidelines for wound management.

Etiology

Intrinsic Factors:

Aging (weak cell regeneration).

Diseases that can cause decubitus such as diabetes mellitus, nutritional status (underweight or overweight), anemia, hypoalbuminemia, neurologic diseases and diseases that damage blood vessels.

Extrinsic Factors:

Lack of bed hygiene.

Lack of mobilization.

Clinical Manifestations

Stage I :

1. There is a change in skin temperature (colder or warmer).
2. Changes in tissue consistency (harder or softer).
3. Changes in skin sensation (itching or pain).
4. In people with fair skin, decubitus wounds will easily appear as persistent redness. However, in people with dark skin, decubitus sores will appear red, blue, or purple.

Stage II:

1. Part of the skin layer is missing, namely the epidermis or dermis, or both.
2. Decubitus wounds have characteristics such as superficial wounds, abrasions, blisters, or forming shallow holes.

Stage III:

Loss of entire layers of skin, including damage or necrosis of subcutaneous or deeper tissue, but not fascia. The wound looked like a deep hole.

Stage IV:

1. Complete loss of skin layers with extensive damage.
2. Tissue necrosis.
3. Damage to muscles, bones or tendons.
4. The presence of deep holes and sinus tracts is also a stage IV wound.

CONCLUSION

Before doing the ROM (Range Of Motion) exercise, there was redness on the patient's lower back, after doing the ROM (Range Of Motion) exercise, the reddish color of the patient's back skin became normal. From the research results, it was found that there was an effect of giving Range of Motion (ROM) exercises on the redness of the lower back of stroke patients. According to researchers, ROM exercises from as early as possible have an effective influence on preventing pressure ulcers.

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