



EFFECT OF BACK MASSAGE IN CHEMOTHERAPY PATIENTS

*¹T. S. Christal Jancy, ²Dr. Jeyalekeshmi S. and Dr. Arzta Sophiya³

¹Associate Professor, White Memorial College of Nursing, The Tamil Nādu Dr.M.G. R Medical University, Chennai.

²Reader, Rani Meyammai college of Nursing, The Tamil Nādu Dr.M.G. R Medical University, Chennai.

³Associate Professor, Christian College of Nursing, The Tamil Nādu Dr.M.G. R Medical University, Chennai.

*Corresponding Author: T. S. Christal Jancy

Associate Professor, White Memorial College of Nursing, The Tamil Nādu Dr.M.G. R Medical University, Chennai.

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INTRODUCTION

One of the most primal and spontaneous ways in which humans offer support to another who is ill or suffering has been through touch. Florence Nightingale, founder of the modern nursing profession, recognized this and regarded caring touch as an essential ingredient of good nursing care. Indeed, touch as a simple expression of interpersonal caring – without technique or manipulation of tissue – is now known to evoke powerful salutogenic responses in the body and mind of the recipient. While various forms of therapeutic manipulation of soft tissue have been practiced across cultures for thousands of years, Swedish (also referred to as “classical”) massage is the most common form in the West and is the core of most massage training programs. Swedish massage was developed in the 19th century by Per Henrik Ling and introduced as a health care modality in the United States (US) in the 1850s by George and Charles Taylor, two physicians who had studied in Sweden.

Massage is now recognized as an intervention for quality of life in both palliative and end-of-life care. Swedish massage has the most extensive evidence base and is the baseline training in most massage schools. Its most recognizable hallmarks are the familiar long, flowing or gliding strokes of effleurage, and the strokes of petrissage that lift, roll, or knead the tissue. These methods also are relatively easily learned and hence can be taught to family care givers. Other common Swedish techniques include friction, vibration, and tapotement (percussion or tapping).

History

Per Henril Ling Modern Western Medicine (1800s-Present Day): Modern Massage Therapy was largely developed during the 19th century Per Henril Ling created as Swedish massage.

The History of Massage Therapy in Ancient Civilizations. Pehr Ling, a Swedish physical therapist, was credited for the birth of the Swedish massage around 1776. Healing method derives from customs and techniques rooted in ancient history. Civilizations in the East and West found that natural healing and massage could heal injuries, relieve pain, and prevent and cure illnesses. reduce stress and produce deep relaxation.

A Form of Massage Emerges in India

Ayurveda is the traditional holistic medical system in India. Ancient seers and natural scientists developed this

system based on centuries of studies, experiments, and meditations

Ayurvedic principles and practices were written sometime between 1500 and 500 BCE. Based on these texts, Ayurveda was widely adopted throughout India and Southeast Asia.

Ayurveda views that individuals incur illnesses and diseases when they live out of harmony with their environment. To treat their conditions, individuals must restore their natural mental and physical balance by re-establishing harmony between themselves and the world around them. At that point, they can begin to heal naturally.

Based on the patient's health imbalances, constitution and the time of year, Ayurveda recommends how to use the five senses to interact with the environment in order to create balance. Treatments in Ayurveda include diet and herbalism, aromatherapy, color therapy, sound therapy, and touch therapy.

Definition

Massage

Massage therapy (MT) is defined as the intentional and systematic manipulation of the soft tissues of the body to enhance health and healing (Benjamin& Tappan).

A Back Massage is any type of massage that is performed on the back of an individual. The back is the posterior side of the human torso and starts just above the buttocks and ends just below the neck. The vertebral column runs all the way through the centre of the back from the 5th Lumbar vertebrae (L5), all the way up to 1st Thoracic Vertebrae (T1). The vertebral column then continues through the neck into the cervical part of the spine.

Cancer Massage

A cancer massage, also known as an oncology massage, uses a light gentle touch with slow and steady movements to help the body relax. Avoid deep tissue massages during cancer treatment, which can contribute to pain and fatigue.

Purposes of Back Massage

1. Back massage helps in stress reduction, increases comfort, and provides increased relaxation.
2. Back massage reduces symptoms of anxiety, pain, fatigue, and nausea reduces muscle tension and improves quality of life.
3. Back massage increases circulation, stimulates venous and lymphatic drainage improving muscle tissue metabolism and elasticity, and promoting relaxation through enhanced parasympathetic and reduced sympathetic nervous system activity.
4. Back massage Reduces stress-related physiological responses such as blood pressure, heart rate, epinephrine, and cortisol and is used for effective symptom management in acute and chronic medical and surgical conditions in adults and children.
5. Increase oxygenation of blood and release metabolic waste such as lactic and uric acids from the tissues of the muscles.

Indication

- Reducing tightness
- Relaxing the back muscles
- Improving circulation
- Reducing back pain
- Realigning the back muscles
- Relieving headaches
- Soothing anxiety and depression
- Counteracting poor sitting posture

Possible Risks

Some potential risks include

- **Infection:** The risk of infection is greater if your white blood cell count is low due to chemotherapy (chemotherapy-induced neutropenia), if you have had recent surgery, or have open sores from radiation therapy or other conditions.
- **Bruising:** If your platelet count is low due to chemotherapy (chemotherapy-induced thrombocytopenia) you will be more likely to develop bruises.
- **Risk of fracture:** If you have bone metastases (spread of cancer to bones), or are on medications

that can weaken your bones (such as aromatase inhibitors for breast cancer) you may be at an increased risk of fractures. While bone metastases are sometimes mentioned as a contraindication for massage, there is also some evidence that massage may reduce pain in people with bone metastases. In this setting, it's important to see a massage therapist who is certified in oncology massage.

- **Skin breakdown:** Rubbing, especially deep tissue massage, may result in skin breakdown, especially during radiation therapy.
- **Reactions to the lotions or oils:** It's important to make sure your massage therapist is aware of any allergies or sensitivities you may have.
- **Dislodging a blood clot:** There is a potential risk of disrupting an undiagnosed blood clot in the leg, which could be dislodged and travel to the lungs. Of note is that blood clots are common among people with cancer, especially after surgery or during chemotherapy. This is one reason why anyone who is considering massage therapy should talk to their oncologist first.

Contraindications

Light massage is safe for most people with cancer, but there are some settings in which massage therapy should be avoided altogether among people with cancer. Some of these include:

- **Known blood clots:** Massage should not be done for anyone who has been diagnosed with a deep vein thrombosis or pulmonary emboli.
- **Infection:** If someone is currently fighting an infection, especially if a fever is present, massage therapy should not be used.
- **Severely low white blood cell count:** If severe leukopenia is present, massage therapy should be deferred until an oncologist gives the clear
- **Severe thrombocytopenia:** For people who have very low platelet counts, massage therapy should not be performed.
- **Lymphedema:** Lymphedema is a relative contraindication to massage. Swelling of a part of the body due to damage to the lymphatics can occur with several types of cancer (especially melanoma), but is most well known as the arm swelling that occurs in some women with breast cancer. If lymphedema is present, a type of massage called manual lymphatic drainage may be needed, but this is usually performed by a different type of therapist who specializes in the treatment of lymphedema.

Back Massage Procedure

Pre procedure care

- Explain the procedure and get the consent from the subjects.
- Inform the patient that the duration of the procedure is 15 minutes.
- Instruct the patient to clean the posterior aspect of the trunk and dry the area with the clean cloth.

- Provide privacy to the patient and positioned the subject in a prone position.

Steps In Back Massage

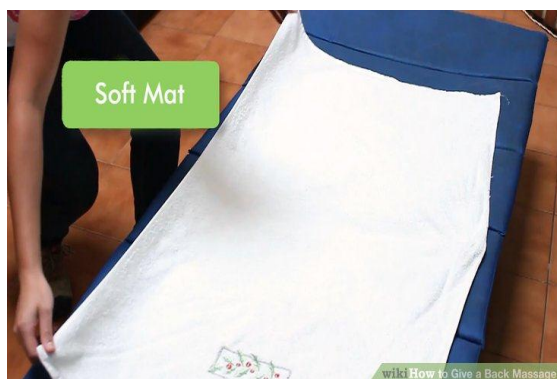
1. Choose a comfortable location

- If there is a massage table, use the massage table it will access the patient back and it will build comfort
- If there is no massage table there is few alternatives such as we can try using the floor or a bed or even a kitchen table, it is enough place for the person to lie on it.
- Some issues will be there by not using the massage table, mostly due to comfort issues for the person receiving the massage and height issues requiring the person.
- Bed is the best option for doing the massage



2. Place a soft mat down

If don't have the massage table place the patient down or lay down in a soft mat. Use a mat that is at least two inches thick to provide the proper comfort for the person while receiving the massage



3. Spread a sheet over the table or mat

A clean sheet is applied over the mat or table. It will be more hygienic and more comfortable for the person. It will catch the excess oil from the persons body and it will prevent damaging the person clothing.



4. Prepare the Room

- Make sure the room should be warm without being hot. It is the ideal atmosphere for the person to relax the muscles while doing the massage.
- Play some uneventful music like ambient music, quiet classical music, or even soundscapes will help the person to relax to their fullest.
- Keep the volume low
- Turn the lights down just enough so there is no glare in the room
- Light scented aromatherapy candles are kept it makes some people to enjoy the smell.

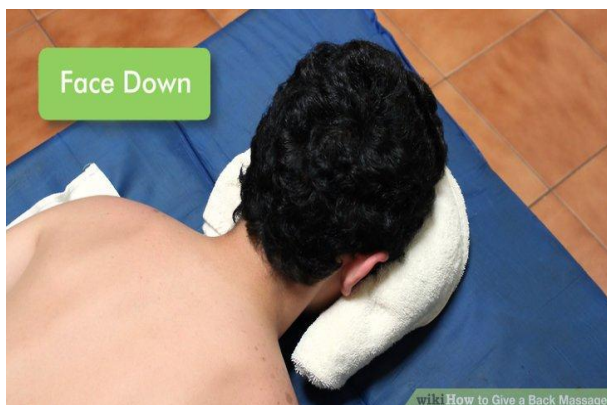
5. Have the person undress to his or her comfort level.

- Massage is best given and received without clothing on the area being massaged, especially using oil or lotion.
- Request the patient or person undresses as much as he or she is comfortable
- Always provide an additional towel or sheet above and beyond the one covering the table. This method person can lie down and cover the parts of his or her body not being massaged. This makes the environment more comfortable and warmer, which makes the person relaxed.
- Provide privacy, Place the person dress down and cover himself or herself with the additional towel or sheet



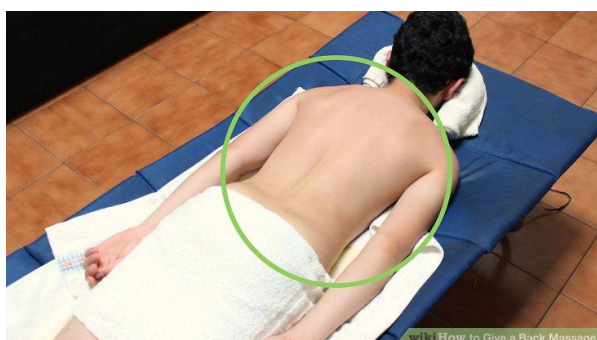
6. Have the person lie face down.

- If massage is done with the proper massage table, then persons face will be rest in the face cradle
- It will comfort the person and can add additional pillow or folded towel beneath the ankles. This will support the person's lower back.



7. Expose the person's back.

If the person is wrapped a towel while undressing or pulled the additional sheet all the way up, and fold the bedsheet or other material so the back will be exposed.



PART 2

Giving a Back Massage

1. Tell the person you are about to begin.

- Tell the person if anything doing are uncomfortable or painful just inform to the therapist or raise the hands
- Explain the procedure with clinical picture so take can easily clear the doubts
- Periodically remind the person to take a deep breath. It will help for relaxation.



2. Pour massage oil in the palm of the hand:

- Start with one teaspoon which is roughly the size of a quarter.
- Warm it by rubbing between the hands before applying to the person
- Use only the organic oils such as coconut oil, grapes seed oil, and almond oil



3. Spread the oil around or Effleurage

- The main technique for spreading the warmed oil across the persons back is called effleurage, which means light friction
- Use gliding movements in long even strokes
- Use the whole hands to do the massage, start from bottom of the back, moving upward, always upward toward the heart.
- While applying pressure bring the hands down the outside of the back tightly
- Repeat this technique for 3-5 minutes.



4. Use Petrissage techniques

- Petrissage uses shorter, circular strokes with more pressure than effleurage.
- Kneading technique uses rolling and pressing to enhance deeper circulation
- This technique can use palm, fingertips or even the knuckles in the short, circular motions.
- This movement come from waist to shoulders and it take 2-5 minutes



5. Apply percussive strokes

- Percussive strokes or tapotement are collections of briefs, repetitive contacts with part of the hand.
- Use the cupped hands and finger tips all gathered to an even point or even the flat the fingers on the knuckle side of the hands to make the contacts

- Spend 2-3 minutes applying the techniques across the entire back



6. Use muscle-lifting techniques

To perform this, close your fingers and hold out the thumb (in a “lobster claw” shape). Apply pressure in a twisting, lifting motion. Keep alternating hands in a “windshield wiper” movement. Move up and down the back 2-3 times.

7. Use a fanning technique

- Position your thumbs at the top of the back, just below the neck and on either side of the spine.
- Using a "fanning" motion with the thumbs extended, push gently down toward the lower back with your pressure angled at the person's feet, not down towards the ground
- Alternate your pressure on either thumb, moving from the top of the back all the way down to the person's hips.
- Make sure you are massaging the muscles on either side of the spine, not directly on the spine itself.

8. Apply twists

- Come back around to the person's side.
- Reach around the far hip with one hand, while the other hand rests on the near hip.
- With a fluid motion, pull one hand towards you as the other one pushes away; in the middle, they should slide against each other, in opposite directions.
- Repeat this stroke up the back until you reach the shoulder area, then come back down.
- Repeat three times.

After Care of the Patient

- Reposition the patient
- Provide psychological support.

Advantages of Back Massage

1. Improves Sleep

The back massage relaxes the larger muscles and relieves tension that may be causing you to have a difficult time falling asleep or staying in a deep sleep. This allows you to have full sleep cycles necessary for optimum performance and good health.



2. Helps the Healing Process

Massaging the body with slightly warm, extra virgin olive oil helps in relieving muscle pains, spasms, sprains and inflamed joints. In addition, it also helps in relieving the pain caused by arthritis and gout.



3. Maternity and Labor

A back massage may help decrease the pain some women feel in their lower backs during labor. This can make childbirth easier and lower the amount of time a woman has to stay in the hospital afterward.

4. Decreases Inflammation

Inflammation of our muscles occurs as a reaction to an injury or infection. While the basis behind inflammation is to protect our bodies, chronic inflammation is never a good thing, and this is where a massage can step in. A study published in the Science Translational Medicine found that massage reduces the production of compounds called cytokines, which play a role in causing inflammation. Massage also decreases inflammation by activating genes that naturally reduce swelling.

5. Relieves from Pain

Massaging the body with slightly warm, extra virgin olive oil helps in relieving muscle pains, spasms, sprains and inflamed joints.

6. Relieves Muscle Tension

A continued massage regimen can help relieve this muscle pain, tension, and soreness.

7. Feels Good

One of the best benefits of a back massage is that it feels good. Sometimes you just need to take a little time to relax and enjoy the pleasurable sensation of the human touch.

8. Relieve Lower Back Pain

A good back massage can help relieve lower back pain. After a strenuous workout or sitting at a desk all day, your back muscles are likely to be tense from overuse or repetitive use.

9. Injury

After consulting your physician to rule out any broken bones or other acute damage, consider using massage to help alleviate the pain and swelling. Begin by massaging near the outer edges of the injury site, not directly on it, relieving the pain caused by arthritis and gout.

10. Increase Circulation

A back massage stimulates circulation and increases blood flow to the area. This will help bring blood with oxygen and nutrients to the muscles and major organs.

Benefits of Massage For People With Cancer

Cancer treatment is aimed at treating a tumor, massage can help people feel pampered as the therapy involves a therapist being devoted to your personal and non-clinical well-being.

Some studies evaluating the potential benefits of oncology massage have focused on specific treatments. For example, a 2016 study looked at a benefit of massage in people going through chemotherapy finds that there is improvement in pain, fatigue, nausea and anxiety.

Chemotherapy -Related Nausea

A 2015 study looking at combining conventional and alternative therapies for cancer found that the combination of conventional and alternative therapies for cancer found that the combination of dexamethasone, massage therapy, and ginger for chemotherapy induced Nausea worked better than some other combinations of conventional and alternative treatments.

Anxiety and stress

Several studies have found that oncology massage can reduce anxiety and stress for people living with cancer. On a more objective level, massage also appears to lower cortisol levels, with this reduction in stress hormones possibly having other physical benefits as well.

Depression/Mood Disorders

Of all of the symptoms that massage may help with, depression and mood disorders have the strongest evidence. Depression and mood disorders are not only common in women with breast cancer, but can be challenging to treat as many antidepressant drugs reduce the effectiveness of some breast cancer medications (such as Tamoxifen). In addition, a few studies have

found that depression is associated with lower survival rates in women with breast cancer.

Cancer Fatigue

Massage has been found to reduce cancer fatigue in some people. While not a life-threatening symptom, fatigue is one of the more annoying and frustrating symptoms for people with cancer and often persists for years after treatment has been completed in those with early-stage disease.

A 2018 study published in the journal *Cancer* found that Swedish massage resulted in significant improvement in cancer-related fatigue for people with stage 0 to stage III breast cancer.

Pain Control

As with nausea and vomiting, oncology massage should not be used instead of conventional treatments for pain, but may help to reduce pain or reduce the amount of pain medication people may need. It may be especially helpful with pain due to surgery. The mechanism isn't well understood, but massage has been found to increase the release of endorphins, and increased levels of endorphins, in turn, are associated with a reduction in pain. A 2018 study found that massage is helpful in providing immediate help for pain,

Palliative Care Benefits

In the palliative care setting, massage therapy may also be helpful. A 2019 study found that massage therapy enhanced well-being, primarily by allowing people to have a break in which they could "escape" from their disease.

Quality of Life

A number of different studies have looked at the benefits of Amna therapy (Japanese massage therapy) for women coping with gynaecological cancers. A 2018 study found that Japanese massage significantly reduce physical symptoms and improved quality of life in this setting.

CONCLUSION

One of the main reasons people with cancer use massage is because it helps them feel good. It is way they feel they can help themselves. Massage therapy can help lift your well-being. The investigator observed that along with Knowledge regarding the cancer, patients' family support, nutrition, and positive thinking should be there for a better outcome.

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