

Appendix 1. Program Implementation Examples for a Case of Lymphedema Following Breast Cancer Surgery

Module 1. Case development



Case: Nursing for a patient with lymphedema after breast cancer surgery

Patient Information:

1. General Information

- Name: Jane Smith
- Age: 55 years
- Gender: Female
- Occupation: Elementary School Teacher
- Marital Status: Married
- Alcohol Consumption: Social Drinker
- Smoking: Non-smoker

2. Disease Information

- Diagnosis: Lymphedema after breast cancer surgery
- Main Symptoms: Swelling in arms and chest, tightness, heaviness, pain
- Onset Timing: 1 week after breast cancer surgery
- Medication History: Painkillers prescribed after surgery, currently no lymphedema treatment
- Past Medical History: No history of lymphedema or other chronic diseases
- Family History: No known family history of lymphedema or breast cancer
- Underlying Conditions: Breast cancer, currently recovering

3. Physical Examination

- Height: 165 cm
- Weight: 70 kg
- Blood Pressure: 120/80 mmHg
- Pulse: 80 beats/min
- Temperature: 37°C
- Respiratory Rate: 16 breaths/min
- Physical examination results: mild to moderate swelling in the left arm and chest, skin discoloration and thickening, reduced range of motion in the left shoulder, no signs of infection or fever

Patient story:

Jane is a 55-year-old elementary school teacher who was recently diagnosed with breast cancer. She underwent surgery to remove the breast cancer tissue and is currently in recovery. However, about a week after the surgery, she began to feel swelling and discomfort in her left arm and chest. She describes the swelling as tight and heavy, and experiences dull pain in her arm. She is having difficulty moving her arm and shoulder freely as she did before. She has also noticed discoloration and thickening of the skin on her left arm and chest. Despite these symptoms, she is optimistic about her recovery and is eager to learn how to manage her lymphedema to improve her quality of life.

Module 2. Patient-nurse role play simulation



Hello, I am feeling some discomfort in my left arm and chest. It feels heavy and sore, and there is a slight pressure and swelling in the left chest area. I don't know what the cause is, but it's been like this for a few days. Do you know what might be causing these symptoms?



Yes, I see. That sounds quite uncomfortable. Since lymph nodes were likely removed during the breast cancer surgery, it may have caused lymphedema in the arm on that side. Is there a noticeable difference in thickness between your left and right arms?



Yes, my left arm is noticeably thicker than my right arm. Additionally, it feels a bit heavier and is more difficult to move compared to my right arm.



Yes, an accurate diagnosis will require some tests, but based on the symptoms you described, it appears to be lymphedema. Lymphedema is a common side effect that can occur after breast cancer surgery. Have you lifted heavy objects or engaged in strenuous activities with your left arm recently?



No, I haven't lifted heavy objects or done any excessive activities. I've been trying to take it easy after the surgery, but the swelling and discomfort seem to have appeared out of nowhere.



It must be very uncomfortable and difficult for you to suddenly experience lymphedema. To prevent and manage lymphedema, we recommend arm exercises. Have you had any training on how to perform these exercises?