

Section: Mental Health Nursing

Hypnotherapy for pain management in patient with breast cancer

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Abstract

Breast cancer is an abnormal condition characterized by the growth of tissue in the breast, which may be benign (non-cancerous) or malignant. Benign tumours, such as fibroadenoma, typically do not spread to other tissues, whereas malignant tumours are invasive and can metastasize to other organs through the bloodstream or lymphatic system. Pain is a common complaint among breast cancer patients, which may result from tumour growth, pressure on surrounding tissues, or medical procedures such as biopsy, surgery, chemotherapy, or radiotherapy. The purpose of this case study is to examine the effect of hypnotherapy in reducing pain among patients with breast cancer. The subject is a 41-year-old female patient who reported pain radiating from the left breast to the left arm, with an intensity rated at 6 on a numeric pain scale. The pain was described as sharp, resembling a needle prick, and intermittent. Following the administration of hypnotherapy over three consecutive days, the patient experienced a noticeable reduction in pain in the affected area. These findings suggest that hypnotherapy may serve as an effective complementary intervention for pain management in breast cancer patients.

Keywords: Breast cancer, complementary therapies, mental health nursing, nursing care, pain management

Introduction

Tumours are abnormal tissue growths in the breast that may be benign or malignant (Paepke et al., 2018). Breast cancer remains a major public health problem globally and in Indonesia. Breast cancer was the most frequently diagnosed cancer worldwide, with approximately 2.3 million new cases (Sung et al., 2021). In Indonesia the incidence reached 42.1 per 100,000 population and breast cancer is the leading cause of cancer-related death among women. Breast cancer is the most common malignancy in Indonesia and a major contributor to female cancer mortality (Osborn et al., 2025). Hospital records from Tidar Hospital, Magelang City, show 211 breast cancer cases documented between September 2024 and February 2025. One of the most common symptoms complained by patient with breast cancer is pain (Wei et al., 2025). This pain can be acute or chronic, depending on the stage of the disease, the body's response to mass growth, and the effect of the medical procedures that the patient is undergoing (Doan et al., 2023). Unmanaged pain significantly erodes a patient's quality of life, compromising the body's resistance and exacerbating psychological distress, including anxiety and depression. In breast cancer patients, pain typically arises from tumour growth, resulting wounds, or bone metastasis (Fukui et al., 2021). Cancer pain is a subjective experience, integrating both physical and non-physical elements (Yin et al., 2023). It can originate from various bodily sources or be a consequence of necessary treatments like surgery or radiotherapy. The pain specifically experienced by breast cancer patients is caused by direct effects on affected organs and surrounding soft tissues (Starkweather et al., 2013). Furthermore, chronic pain depresses tissue metabolism, elevates blood coagulation, causes fluid retention, disrupts sleep, and negatively impacts behaviour, often leading to extended hospital stays. Untreated pain induces anxiety, despair, depression, the wish to die, and fear in both patients and relatives, severely restricting the client's ability to sleep and perform basic Activities of Daily Living (ADL).

Effective pain management is crucial, as the conventional pharmacological approach using analgesics is limited by long-term side effects, drug tolerance, and dependency. Consequently, non-pharmacological approaches—such as distraction, massage, aromatherapy, relaxation techniques, and music therapy—are essential complementary therapies. Among these, hypnotherapy is a non-pharmacological technique that uses hypnosis to help manage or reduce pain (Elkins et al., 2007). Its mechanism of action involves blocking pain signals from reaching the cerebral cortex by reducing activity in brain regions associated with pain perception and increasing activity elsewhere (Walter et al., 2025). Specifically, heightened dopaminergic activity, often associated with hypnosis, can suppress the reception of pain signals by cortical structures. Physiologically, when a painful stimulus travels through the nervous system to the spinal cord and then to the brain stem, it is received by the cerebral cortex. Hypnotherapy interventions effectively disrupt this signal transmission, much like diverting a telephone network signal (Lee et al., 2012). Given that pain and anxiety are strongly linked to increased morbidity and mortality rates in patients with breast cancer, their relief is a

major concern for improving health outcomes (Chester et al., 2016). Because hypnotherapy measures can be safely applied to cancer patients experiencing mild to moderate pain, this case study aims to evaluate the effect of hypnotherapy for pain management in patients with breast cancer.

Case Description

The subject of this case study was a 41-year-old female patient with chronic pain related to breast cancer, treated at Tidar Hospital, Magelang City. The patient reported pain originating from the left breast and radiating to the left shoulder and arm, with an initial intensity of 6 on the numeric pain scale. She described the pain as stabbing and burning. The patient had a surgical wound on the left breast from an operation two years earlier; the left hand was reported to be swollen. On inspection, the left breast was covered with a gauze dressing approximately 15 cm in length; the wound appeared moist without visible exudate. The breasts were asymmetric with postoperative wrinkling. Palpation revealed tenderness along the left breast surgical scar, with pain radiating toward the shoulder and left arm. On assessment the patient's vital signs were: blood pressure 140/80 mmHg, temperature 36.8 °C, pulse 98 beats per minute, respiration 22 breaths per minute, and SpO₂ 98%. Hypnotherapy was administered according to a defined protocol with specific dosages and durations. Following the intervention, the patient reported clinically meaningful pain relief and an overall improvement in condition. Pain intensity decreased and the patient's comfort and functional status improved after the hypnotherapy sessions.

Discussion

The patient, two years post-breast cancer surgery (mastectomy), presented with a chief complaint of chronic pain (Roth et al., 2018). Subjectively, the patient reported left breast pain radiating from the shoulder down to the left arm. This pain, described as stabbing and burning, intensifies with movement or touch, rating 6/10, and subsides to 4/10 at rest, though it never fully disappears. The patient also reported significant difficulty moving the left arm due to the pain, accompanied by generalized weakness and lethargy. Objectively, the patient appeared pale, weak, and grimacing, often holding their chest, and required family assistance for Activities of Daily Living (ADLs). Physical examination revealed a gauze-covered surgical wound on the left breast, approximately 15 cm in length, which was noted to be moist but without exudate. The post-surgical breast area showed wrinkling and asymmetry compared to the right breast. Tenderness was noted along the left breast scar, radiating from the shoulder to the left arm, which was also visibly swollen. This constellation of complaints—pain lasting more than three months, swelling, burning/stabbing sensations, and restricted movement—is highly characteristic of the side effects following mastectomy. These long-term effects often include pain, swelling (lymphedema), hematoma, seroma, limited arm/shoulder mobility, numbness, and neuropathic pain, sometimes specifically diagnosed as Post-Mastectomy Pain Syndrome (PMPS). Given the duration and impact on physical, psychological, and social well-being, the primary nursing problem identified is Chronic Pain.

From three days of intervention (October 27–29, 2025), the patient experienced a marked reduction in breast and arm pain after a 25-minute deep hypnotherapy session each day. Hypnotherapy reduced anxiety and postoperative stress, promoting parasympathetic activation with corresponding decreases in pulse, blood pressure, and respiratory rate (Leo et al., 2024; De Benedittis et al., 2024; Queirolo et al., 2025). Pain that persisted on days 1 and 2 resolved by day 3, and the patient reported improved ability to control pain and increased physical mobility. Pain scores when moving decreased from 6/10 (pre-treatment, 27 Oct) to 5/10 (post-treatment, day 1), then to 5/10 pre-treatment and 4/10 post-treatment on day 2 (28 Oct), and finally to 3/10 on day 3 (29 Oct). At rest, pain declined from 4/10 (pre-treatment, day 1) to 4/10 (post-treatment, day 1), then to 3/10 after day 2, and 2/10 after day 3, reflecting a shift from moderate to mild pain and clinically meaningful symptomatic improvement.

After the hypnotherapy session, the patient's pain scale decreased to 5/10 during movement and remained 4/10 at rest, indicating an initial positive response to therapy. On the second day (October 28, 2025), there was a further reduction: the pain scale before therapy was 5/10 when moving and 4/10 at rest, then decreased to 4/10 and 3/10, respectively, showing a shift from moderate to mild pain. On the third day (October 29, 2025), the pain scale stabilized at 3/10 during movement and 2/10 at rest, both before and after the hypnotherapy session. This indicates that the patient had begun to achieve consistent pain control, with mild and relatively stable pain levels. Overall, the evaluation results demonstrate that hypnotherapy was effective in progressively reducing pain intensity and improving patient comfort. The overall decrease—from 6/10 to 3/10 when moving and from 4/10 to 2/10 at rest—illustrates a positive therapeutic response. The patient also reported feeling more relaxed and less anxious about the pain. Physiologically, hypnotherapy can enhance the release of endorphins, the body's natural analgesic hormones, and reduce stress hormones such as cortisol. Lower cortisol levels help reduce muscle tension, improve blood circulation, and stabilize the autonomic nervous system, making the body feel lighter and more comfortable while significantly reducing pain. Over three days of therapy, the relaxation effect and improved emotional control further strengthened autonomic regulation, contributing to decreased production of stress hormones such as cortisol and adrenaline. As a result, the patient's vital signs became more stable, and the healing process was optimized through a more efficient immune response in a calm physiological state.

Conclusion

The application of hypnotherapy as a complementary intervention for pain management in patients with breast cancer has shown promising outcomes. In this case study, hypnotherapy administered over three consecutive days resulted in a notable reduction in pain intensity, improved patient comfort, and enhanced emotional well-being. The patient reported a decrease in stabbing pain radiating from the breast to the arm, along with a greater sense of relaxation and control. These findings support the therapeutic potential of hypnotherapy in addressing cancer-related pain, particularly when integrated into holistic nursing care. As a non-invasive, low-risk, and patient-centred approach, hypnotherapy may serve as an effective adjunct to conventional pain management strategies, contributing to improved quality of life for individuals undergoing cancer treatment. Further research with larger sample sizes is recommended to validate these findings and explore broader clinical applications.

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