

## A Case Report of Palliative Care in a Patient with Breast Cancer

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### Abstract

Breast cancer is the most frequently diagnosed life-threatening cancer in women and the leading cause of cancer death among them worldwide [1-3]. Breast cancer is mainly diagnosed in early stages (90–95%), however 20–30% of these patients become metastatic and to this day incurable. Bone is the single most frequent site for metastases and is involved in about 70% of all metastatic patients [4-6]. Here we report the case of a 61-year-old female patient diagnosed with breast cancer with bone metastasis. Due to bone metastases, the lady has complains from the pain. Metastatic breast cancer can hardly be cured and is often treated by treatments with palliative intent to alleviate or prevent breast cancer-induced unpleasant symptoms and possibly prolong survival of the patient. Cancer-related pain is mostly managed using drug therapy. There is increasing recognition of the need for non-drug approaches and TENS may have a significant role to play. For softening the pain, it was recommended, to the lady, to have 2 sessions of 30 minutes each a day of TENS. TENS is a very efficient therapy for soothing the invasive pain.

**Keywords:** Breast Cancer, Palliative Care, Pain, TENS.

### Introduction

Breast cancer is the most frequently diagnosed life-threatening cancer in women and the leading cause of cancer death among them worldwide [1]. About 1 in 8 women are diagnosed with breast cancer during their lifetime. There is a good chance of recovery if it's detected in an early stage [2, 3]. Breast cancer is mainly diagnosed in early stages (90–95%), however 20–30% of these patients become metastatic and to this day incurable. Bone is the single most frequent site for metastases and is involved in about 70% of all metastatic patients [4-6]. Pain is one of the most common and probably most feared symptoms of advanced cancer and the prevalence of chronic pain in patients with advanced cancer is 70–90% [7-10]. TENS has an important role in the management of cancer-related pain [11-16]. TENS improve function, range of movement, quality of life, mood, pain coping, sleep, analgesic consumption.

### Case Presentation

A 61-year-old a female patient diagnosed with breast cancer with bone metastasis in 2019. The examinations are CT done on 9.8 .2019.

**It was found:** In the inside, half of the right half breast was seen a damage in the lesion with a radial nodule with anomalistic boundaries 2.4 x 2.4. In the left bottom lobby of pulmonary

parenchyma were seen nodular lesions. In the fourth right rib were seen osteolytic lesions with cortical erosion. Echo done on 13.8.2019 shows: A specular nodule in the right breast 26x33mm, BIRADS.

### Biopsy on 21.8.2019, Microscopic description: Infiltrative ductal carcinoma G2.

Biopsy on 10.9. 2019: Er=70%, Pr=30% HER2=1+ Ki67=30%. After setting the diagnose, the patient started the chemotherapy treatment. In the CT done 6 month after the chemotherapy treatment, was seen a hyperdense specular formation 20x17mm. Moreover, in the extern quadrant a mammary nodule was noted. By comparing with the previous examinations was seen a reduction in the cancerous mass. Also, osteolytic lesions were noted in vertebral column, iliac layers and in sacrum.

### Conclusion

Breast cancer dexter with bone metastases. Due to bone metastases, the lady complains due to pain. Metastatic breast cancer can hardly be cured and is often treated by treatments with palliative intent to alleviate or prevent breast cancer-induced unpleasant symptoms and possibly prolong survival of the patient.

For softening the pain, it was recommended, to the lady, to have 2 sessions of 30 minutes each a day of TENS (Transcutaneous

electrical nerve stimulation). TENS is a very efficient therapy for soothing the invasive pain. The analgesic action of TENS is mediated by peripheral and central nervous system mechanisms, both spinal and supra spinal [17]. The clinical use of conventional TENS is underpinned by the gate control theory of pain [18], which suggests that there is a 'gating' mechanism in the dorsal horn of the spinal cord, which can control nociceptive signals and ultimately influence the pain experience. In summary, the stimulation of large diameter (A- beta) afferent fibers is thought to 'close the gate' and reduce the perception of pain. After some treatment sessions of TENS, the lady refers soothing of pain while walking as well as improvement in mood and sleep.

## Discussion

TENS gave satisfactory results in soothing the lady's pain. Transcutaneous electrical nerve stimulation (TENS) has been widely used for many years to manage a range of acute and chronic pain problems. There are currently five Cochrane systematic reviews addressing the use of TENS for noncancerous pain [11-15]. The single available review in cancer pain addresses non-drug approaches for symptoms related to cancer and includes the evidence on TENS for pain management [16-19]. Although experts in the field suggest that TENS has an important role in the management of cancer-related pain, and a recent case series suggested a potential role in cancer bone pain, it is clear that there is currently no guidance for clinicians on the use of TENS for oncology and palliative care patients. The clinical benefit of TENS for cancer patients with pain remains controversial [16, 20].

The findings of Bennett 2010 indicated that cancer bone pain on movement might improve with TENS compared to placebo. The former provided little evidence that TENS was superior to a placebo in treating women with chronic pain following breast cancer treatment. TENS was significantly better than placebo in treating pain in palliative care patients.

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