Progressive Muscle Relaxation on Life-altering Symptoms in Patients with Hepatocellular Carcinoma Undergoing Transarterial Chemoembolization Therapy.

Chutima Meechamnan[1] Nuttamon Vuttanon[2] and Patchara Naktonom[3]
[1]Faculty of Nursing,Chiang Mai University, Thailand.
[2]College of Nursing, University of Illinois at Chicago, IL, USA

Abstract

Statement of the problem: In Thailand, Hepatocellular carcinoma (HCC) ranks as the number one cancer in men and fourth in women. It is also the major cause of death in men and ranks second in women. Transarterial Chemoembolization (TACE) is the recommended treatment for HCC patients, resulting in delayed tumor progression and prolonged survival. However, TACE leads to several life-altering symptoms including pain, fever, and nausea and/or vomiting. Current knowledge on integrative therapies demonstrates that some techniques such as the Progressive Muscle Relaxation might assist with pain management.

Methodology & Theoretical Orientation: The study used a one group pre- and post- test design. Participants were 30 HCC patients who underwent first TACE attending a university hospital in Thailand. They received PMR training and provided a PMR CD for home practice. They were educated to use PMR as needed for symptom management for six weeks at home, kept a log of symptom rating book each time PMR was used, recorded the time of day and made immediate pre- and –post treatment recording the symptoms severity using a 0-10 scale.

Finding: The two most life-altering symptoms after TACE were pain, which can be classified as lower back pain, and upper back pain. The changes in symptom ratings from pre- to post-PMR were significant. Mean lower back pain scores decreased from 4.71 (SD = 0.82) pre-treatment to 3.80 (SD = 0.60) post-treatment ($Z=-3.70$, $p<0.01$), and mean upper back pain scores decreased from 4.33 (SD = 0.45) pre-treatment to 2.73 (SD = 0.33) post-treatment ($Z=-3.92$, $p<0.01$).

Conclusion & Significant: This study has shown the efficacy of Progressive Muscle Relaxation techniques in decreasing pain on patients and suggest that PMR should be considered for all patients with HCC experiencing pain.

Recent publications (minimum 5)

1. Raoul JL, Sangro B, Forner A, et al. Evolving strategies for the management of intermediate-stage hepatocellular carcinoma: available evidence and expert opinion on the use of transarterial chemoembolization. *Cancer Treat Rev*.2011;37(3):212–220.

2. Wenting C, Juan L, Chen H, et al. Symptom clusters and symptom interference of HCC patients undergoing TACE: a cross-sectional study in China. *Support Care Cancer*. 2013;21(2):475-483.

3. Sun VC, Sarna L. Symptom management in Hepatocellular carcinoma. *Clin J Oncol Nurs*. 2008;12(5):759-766.

4. Chiaramonye D, D′Adamo C, Morrison B. Integrative approaches to pain management. In: Benzon HT, editor. *Practical management of pain*. 5th ed. Philadelphia: Elsevier Mosby; 2014. p. 658-68.

5. World Health Organization. *Cancer Country Profiles, 2014* [updated 2014; cited 2015 May 2]. Available from http://www.who.int/cancer/country-profiles/tha-en.p

Biography (150 word limit)

Dr.Nuttamon Vuttanon is Associate Professor working at Faculty of Nursing, Chiang Mai University, Thailand. Urological adult nursing is at the core of her nursing practice. Her long term research goal is to create and test interventions to reduce symptom burden in cancer patients. Her pioneering studies have been conducted on pain management among patients with urological cancer. In her research, she and her colleagues have found that patients with cancer suffer both from the disease itself and the treatment. Presently, she is conducting a longitudinal trial to test the effects of progressive muscle relaxation on reducing symptoms in cancers. Her studies have received funding from Chiang Mai University and other sources.

Email : nuttamon.v@cmu.ac.th