Physiotherapy and physical exercise improve the general states of breast cancer survivors

Publication Date: 2012-03-06

Rosabel Liñán Sánchez
Universidad de Granada
Acera de San Ildefonso s/n
18071 Granada
Spain
ri@ugr.es
Tel: 34 958243170
Fax: 958246130
http://www.ugr.es/

Fatigue in breast cancer survivors causes depression, poor body image, neck pain and impaired shoulder movement. University of Granada researchers propose a multimodeal treatment to fight the side effects of breast cancer surgery.

University of Granada researchers, in collaboration with the University Hospital Virgen de las Nieves, Granada, Spain, have developed a physiotherapy and physical exercise program that considerably reduces muskuloskeletal pain in breast cancer survivors. A study recently published has demonstrated that physical therapy is very effective in reducing fatigue and α-amylase, thus improving neck mobility, muscle strength and general state in breast cancer survivors.

Fatigue in breast cancer survivors causes depression, poor body image, neck pain and impaired shoulder movement; consequently fatigue has a multidimensional character. The research study conducted at the University of Granada has revealed that a multimodal program including physiotherapy and physical exercise is the best option to relieve the aftereffects of this condition.

This study included a group of breast cancer survivors referred to the Oncology Service of the Hospital Virgen de las Nieves, Granada. A descriptive study of each participant was performed to better know the sample main characteristics. Additionally, intervention trials were conducted using different physiotherapy protocols (to treat fatigue and pain) including physical activity (to treat fatigue).

Promising Results

The results obtained in this research study are very promising. The eight-week multimodal program including physical activity and physiotherapy improved salivary α-amylase levels, muscular strength and neck and shoulder mobility in the affected side. Similarly, fatigue and mood disturbances decreased. These results were visible both on completion of the program (eight weeks) and at six-month follow-up.

The study conducted at the University of Granada has confirmed that strength evaluated by dynamometry is strongly correlated with quality of life and health status in breast cancer survivors. As far as pain is concerned, the researchers found general hypersensitivity in post-mastectomy patients. No significant differences were found between the two surgery groups (mastectomy- lumpectomy), which demonstrates that other factors are involved in the development of pain. Physiotherapy was proven to be efficient in improving the immunological function and mood state in women with a positive attitude towards their treatment.

The researchers described central and peripheral hypersensitization processes in breast cancer survivors by studying pressure pain thresholds and myofacial trigger points characterizing musculoskeletal pain. In addition, they evaluated the effectiveness of manual massage on the psychological and immunological state and on cancer-induced pain in breast cancer survivors.

The authors of this paper are Irene Cantarero Villanueva, Carolina Fernández Lao and Manuel Arroyo Morales, at the University of Granada Department of Physiotherapy. This research paper has been awarded the 1st prize in the Investigación 2011 contest organized by the Ilustre Colegio de Fisioterapia de Andalucía.

References:

Fernández-Lao C, Cantarero-Villanueva I, Fernández-de-las-Peñas C, Del-Moral-Ávila R, Menjón-Beltrán S, Arroyo-Morales M. "Widespread mechanical pain hypersensitivity as a sign of central sensitization after breast cancer surgery: comparison between mastectomy and lumpectomy". Pain Med. 2011 Jan;12(1):72-8. doi: 10.1111/j.1526-4637.2010.01027.x. Epub 2010 Dec 10. PubMed PMID: 21143767.
Cantarero-Villanueva I, Fernández-Lao C, Del Moral-Avila R, Fernández-de-Las Peñas C, Feriche-Fernández-

Castanys MB, Arroyo-Morales M. "Effectiveness of core stability exercises and recovery myofascial release massage on fatigue in breast cancer survivors: a randomized controlled clinical trial". Evid Based Complement Alternat Med. 2012;2012:620619. Epub 2011 Jul 17

Contact:

- Irene Cantarero Villanueva. Department of Physiotherapy.E-mail address: irenecantarero@ugr.es

- Carolina Fernández Lao. University of Granada Department of Physiotherapy. E-mail address: carolinafl@ugr.es

Subject: 39;
Country: Spain;
Institution: Public Research;
Category: Press Alert;

RCN: 29529
Quality Validation Date: 2012-03-06