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INVITED EDITORIAL

Is physiotherapy useful to the breast cancer patient?

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The number of breast cancer patients is continuously increasing in the western world. The number of cured patients is also increasing and those with chronic disease, even if not cured, survive longer [1,2]. Surgery and radiotherapy treatments have developed during the past decades causing less damage to the structures [3]. Still patients are left with more or less impairment of the arm function, in particular those receiving both surgery and radiotherapy to the axilla [4–6]. Many of the current breast cancer patients are born in the '40s or '50s, belonging to a generation used to working outside their homes and to be physically active during their spare time. After cancer treatment most of these women have a wish to get physically fit again, being able to perform whatever activities they used to perform before the cancer and its treatment.

Physical activity is of benefit for cancer patients in general including reduced fatigue, nausea, body fat, anxiety and depression and increased muscle strength, lean body mass, aerobic capacity, enhanced immune function, and improved quality of life ratings [7] as well as reduced risk for cancer [8]. Thus, due to these benefits, it is of great importance that the breast cancer patients do not experience physical restrictions in their daily work or in sports or other spare time activities, but can continue with such activities postoperatively as soon as possible. Some restrictions are associated to arm lymphoedema and reduced shoulder mobility and muscle strength, which are well known late symptoms of the breast cancer treatment [5,9–11].

Treatment of joint range of motion and muscle weakness are areas related to physiotherapy. In order to prevent reduced shoulder mobility, active arm exercises are important. Breast cancer patients receiving no physiotherapy postoperatively show significant limitation in range of motion and function in the shoulder 3 months after breast cancer treatment compared to patients performing active exercises and functional activities [12]. However, in this issue of Acta Oncologica a study is presented by Lauridsen et al. showing that also "late" physiotherapy, starting more than 6 months postoperatively, improved the shoulder function significantly [13].

During the past 15 years lymphoedema treatment has also become incorporated in physiotherapy. Some parts of the lymphoedema treatment, like compression bandaging and garment, are undoubtedly effective [14–16]. However, other parts like manual lymph drainage are still discussed and need to be further evaluated [17].

To be able to maintain the muscle strength of the ipsilateral arm, it is important for the patient to continue on the same activity level, during work as well as in spare time, as soon as possible postoperatively. This possibility is often reduced through restrictions concerning prevention of lymphoedema, when the patient is advised "to be careful" with the arm and to change most of the physical loading to the contralateral arm. On the contrary, postoperatively ongoing work and spare time activities on the same level as preoperatively, seem to reduce the lymphoedema development [18]. Lately, a few studies have shown heavy exercises to be "safe" for such a development [19,20]. Thus, the future for the breast cancer patients seems to contain much more physical activities and less passivity than before. In this field the physiotherapists already are and

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hopefully will become even more involved, not only advising the patient, but also educating other professionals meeting the breast cancer patient.

Finally, to answer the opening question "Is physiotherapy useful to the breast cancer patient?" the answer will be "Yes, indeed!" We now also know that this is worthwhile even if the start is delayed until after 6 months [13], although there is no rationale to postpone the start.

References

[1] Talbäck M, Stenbeck M, Rosén M, Barlow L, Glimelius B. Cancer survival in Sweden 1960–1998 – Developments across four decades. Acta Oncol 2003;42:637–59.

[2] Bergh J, Jönsson P-E, Glimelius B, Nygren P. A systematic overview of chemotherapy effects in breast cancer. Acta Oncol 2001;40:253–81.

[3] Rutqvist L-E, Rose C, Cavallin-Ståhl E. A systematic overview of radiation therapy effects in breast cancer. Acta Oncol 2003;42:532–45.

[4] Höjris I, Andersen J, Overgaard M, Overgaard J. Late treatment-related morbidity in breast cancer patients randomized to postmastectomy radiotherapy and systemic treatment versus systemic treatment alone. Acta Oncol 2000;39: 355–72.

[5] Johansson K, Ingvar C, Albertsson M, Ekdahl C. Arm lymphoedema, shoulder mobility and muscle strength after breast cancer treatment. A prospective 2-year study. Advances in Physiotherapy 2001;3:55–66.

[6] Blomqvist L, Stark B, Engler N, Malm M. Evaluation of arm and shoulder mobility and strength after modified radical mastectomy and radiotherapy. Acta Oncol 2004;43:280–3.

[7] Galvão DA, Newton RU. A review of exercise intervention studies in cancer patients. J Clin Oncol 2005;23:899–909.

[8] McTierman A, Kooperberg C, White E, Wilcox E, Wilcox S, et al. Recreational physical activity and the risk of breast cancer in postmenopausal women: the Women's Health Initiative Cohort Study. JAMA 2003;290:1331–6.

[9] Ivens D, Hoe AL, Podd TJ, Hamilton CR, Taylor I, Royle GT. Assessment of morbidity from complete axillary dissection. Br J Cancer 1992;66:136–8.

[10] Hladiuk M, Huchcroft S, Temple W, Schnurr BE. Arm function after axillary dissection for breast cancer: A pilot study to provide parameter estimates. J Surg Oncol 1992;50: 47–52.

[11] Tengrup I, Tennvall-Nittby L, Christiansson I, Laurin M. Arm morbidity after breast-conserving therapy for breast cancer. Acta Oncol 2000;39:393–7.

[12] Wingate L, Croghan I, Natarajan MS, Michalek AM, Jordan C. Rehabilitation of the mastectomy patient: A randomized, blind, prospective study. Arch Phys Med Rehabil 1989;70: 21–4.

[13] Lauridsen MC, Christiansen P, Hessov I. The effect of physiotherapy on shoulder function in patients surgically treated for breast cancer: a randomised study. Acta Oncol 2005 (in press).

[14] Brorson H, Svensson H. Liposuction combined with controlled compression therapy reduces arm lymphoedema more effectively than controlled compression alone. Plast Reconst Surg 1998;102:1058–67.

[15] Johansson K, Lie E, Ekdahl C, Lindfeldt J. A randomized study comparing manual lymph drainage with sequential pneumatic compression for treatment of postoperative arm lymphedema. Lymphology 1998;31:56–64.

[16] Johansson K, Albertsson M, Ingvar C, Ekdahl C. Effects of compression bandaging with or without manual lymph drainage treatment in patients with postoperative arm lymphedema. Lymphology 1999;32:103–10.

[17] SBU-Alert. Manuel lymph drainage combined with compression therapy for arm lymphedema following breastcancer treatment. Report no 2005–04.

[18] Johansson K, Ohlsson K, Albertsson M, Ingvar C, Ekdahl C. Factors associated with the development of arm lymphedema following breast cancer treatment: A match pair case-control study. Lymphology 2002;35:59–71.

[19] Harris SR, SL Niesen-Vertommen. Challenging the myth of exercise-induced lymphedema following breast cancer: A series of case reports. J Surg Oncol 2000;74:95–9.

[20] McKenzie DC, Kalda AL. Effect of upper exercise on secondary lymphedema in breast cancer patients: Apilot study. J Clin Oncol 2003;3:463–6.