

## Physiotherapy Treatment in the End of Life Care

Anna Pyszora\* and Małgorzata Krajnik

Department of Palliative Care, Nicolaus Copernicus University in Toruń, Ludwik Rydygier Collegium Medicum in Bydgoszcz, Poland

Physiotherapy makes up an essential component of symptomatic treatment in the cancer patients remaining in palliative care. Its primary aim consists in improving their overall quality of life. This is achieved, inter alia, through alleviating the most bothersome symptoms associated with cancer disease, and other ailments constraining patients' activities [1]. It is also vital to maintain feasible physical activity level and self-reliance in the patients within the limits demarcated by the specifics of the disease, while effectively helping them adapt to their emerging functional limitations.

One of the symptoms acknowledged to appreciably affect overall quality of life in those patients is the cancer-related fatigue (CRF). Regrettably enough, CRF remains often underdiagnosed by physicians as a bona fide factor, and therefore seldom addressed when discussing specific coping strategies with the patients [2]. One of the factors that aggravate CRF consists in the lack of patients' physical activity. Hence, physical exercises have been established as one of the key components of non-pharmacological treatment of the fatigue syndrome. To date, many studies have corroborated overall effectiveness of various forms of physical activity in the CRF patients remaining under intensive cancer treatment, as well as in the cancer survivors [3].

Much fewer research projects have been completed in the population of patients with advanced cancer, remaining in palliative care [4-8]. Our study comprised 60 patients with CRF who received either hospital or home palliative care [9]. The patients were randomly assigned to a therapeutic or a control group. Those in the therapeutic group attended 6 physiotherapy sessions spread over 2 weeks. Each physiotherapeutic intervention lasted 30 minutes and comprised Myofascial Release (MFR) techniques, selected Proprioceptive Neuromuscular Facilitation (PNF) techniques, and active physical training.

Patients were additionally requested to assess the extent of their fatigue through Brief Fatigue Inventory (BFI) and other ESAS (Edmonton Symptom Assessment Scale) scores. The control group subjects did not have the benefit of physiotherapy, and were merely asked to assess their fatigue and other symptoms in the above referenced scales. Having different physiotherapeutic methods effectively combined within the same intervention regimen was our original idea, well anchored in the body of experience gained through working with patients suffer from advanced cancer.

We started off each therapeutic session with passive techniques (MFR), which did not require any effort from the subjects. At the following stage selected PNF techniques were introduced, based on isometric contraction and isotonic contraction combinations with little resistance. In the end, the patients were asked to round up each session by performing simple physical exercises. The results yielded by the study revealed that the proposed physiotherapy regimen appreciably reduced the patients' fatigue level, as assessed by the BFI questionnaire. Furthermore, the intervention tangibly improved the patients' overall disposition, while at the same time alleviating concomitant symptoms, especially pain, drowsiness, lack of appetite, and a sense of despondency.

No such results were encountered in the control group. The study results clearly demonstrate that physiotherapy may be a valuable component in the non-pharmacological treatment of CRF in cancer

patients at the end-of-life stage. Obviously enough, further research is very much required to have this issue addressed at some depth. In practical terms, it would also be rather prudent to determine which specific types of physiotherapeutic intervention prove by far the most beneficial to the patients. This notwithstanding, we may venture to say that physiotherapy is an essential and often very effective component of symptomatic treatment at the end-of-life stage. A physiotherapist brings the patients "real hope", i.e. he is personally involved in resolving minor problems along with a patient, helps remove assorted minor obstacles, so that everyday life may be made a bit easier, and generally is around to let the patient truly enjoy any small successes, while respecting the process of passing away and all its attendant limitations.

### References

1. Kumar SP, Jim A (2010) Physical therapy in palliative care: From symptom control to quality of life: A critical review. *Indian J Palliat Care* 16: 138-146.
2. Vogelzang NJ, Breitbart W, Cella D, Curt GA, Groopman JE, et al. (1997) Patient, caregiver, and oncologist perceptions of cancer-related fatigue: results of thi-part assessment survey. *Semin Hematol* 2: 4-12.
3. Cramp F, Daniel J (2008) Exercise for the management of cancer-related fatigue in adults (Review). *Cochrane Database Sys Rev*.
4. Porock D, Kristjanson LJ, Tinnelly K, Duke T, Blight J, et al. (2000) An exercise intervention for advanced cancer patients experiencing fatigue: A pilot study. *J Palliat Care* 3: 30-36.
5. Buss T, de Walden-Gałuszeko K, Modlińska A (2010) Kinesitherapy alleviates fatigue in terminal hospice cancer patients - An experimental, controlled study. *Support Care Cancer* 6: 743-749.
6. Oldervoll LM, Loge J, Lydersen S, Paltiel H, Aspg MB, et al. (2011) Physical exercise for cancer patients with advanced disease: A randomized controlled trial. *Oncologist* 16: 1649-1657.
7. van den Dungen IA, Verhagen CA, Van den Graaf WT, van den Berg JP, Vissers KC, et al. (2014) Feasibility and impact of a physical exercise program in patients with advanced cancer: A pilot study. *J Palliat Med* 17: 1091-1098.
8. Cheville AL, Kollasch J, Vandenberg J, Shen T, Grothey A, et al. (2012) A home-based exercise program to improve function, fatigue, and sleep quality in patients with IV stage lung cancer and colorectal cancer: A randomized controlled trial.
9. Pyszora A, Budzyński J, Wójcik A, Prokop A, Krajnik M (2017) Physiotherapy program reduces fatigue in patients with advanced cancer receiving palliative care. Randomized controlled trial. *Support Care Cancer* 25: 2899-2908.

\*Corresponding author: Anna Pyszora, Department of Palliative Care, Nicolaus Copernicus University in Toruń, Ludwik Rydygier Collegium Medicum in Bydgoszcz, Poland, E-mail: [aniap30@wp.pl](mailto:aniap30@wp.pl)

Received June 27, 2017; Accepted September 04, 2017; Published September 11, 2017

Citation: Pyszora A, Krajnik M (2017) Physiotherapy Treatment in the End of Life Care. *J Yoga Phys Ther* 7: 272. doi: [10.4172/2157-7595.1000272](https://doi.org/10.4172/2157-7595.1000272)

Copyright: © 2017 Pyszora A, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.