memo (2012) Vol. 5: 55–56
 DOI 10.1007/s12254-012-0343-2
 Printed in Austria
 © Springer-Verlag 2012

memo
 magazine of european medical oncology

Medical aspects in oncological rehabilitation

J. Klocker¹, U. Klocker-Kaiser², D. Geissler¹

¹1st Medical Department, General Hospital Klagenfurt, Klagenfurt, Austria

²Department for Psychiatry and Psychotherapy, General Hospital Klagenfurt, Klagenfurt, Austria

Received 14 November 2011; accepted 6 March 2012

Due to increasing numbers of cancer patients caused by both today's longer life expectancy and the drop in cancer mortality, the number of patients who have gone through cancer continuously increases. Such patients not only are often physically impaired and psychologically vulnerable but show also socio-economic adverse effects. Hence, efficient oncological rehabilitation is only possible when this complex situation is taken into account by approaching the following four aspects: (1) acceptance and handling of organic failures, (2) reassessment and lifestyle adjustments, (3) psychological stabilisation and (4) social and occupational reintegration. The current article gives a brief summary of the measures crucial for a successful oncological rehabilitation.

Keywords: Oncological rehabilitation, handling organic failures, lifestyle correction, psychological stabilisation, reintegration.

Introduction

Every year about 36,000 Austrians develop cancer. Fortunately, the 5-year survival rate for all cancer patients in Austria is increasing because of improved early diagnosis and more effective treatments. In 1983 the 5-year survival rate was only 40%; in 2003 it was already 62% and still rising [1]. Both the increase in malignant tumours in the context of a longer life expectancy and the drop in cancer mortality result in a continuous rise in the number of patients who have gone through cancer. These patients show numerous disorders such as organic failures caused by the illness, mental disorders and disorders caused by the therapy, as well as socio-economic adverse effects.

The care of cancer patients consists of check-ups for early detection, the therapy phase and aftercare. During therapy, surgical intervention, radiotherapy, the wide range of medication-based therapies in the form of chemotherapy, hormone therapy, immunotherapy, the new target-oriented therapies and complementary approaches are available for treatment. Psychological support is a very important aspect during therapy [2]. Aftercare involves regular follow-up examinations. Be-

cause the length of stay in public hospitals after cancer treatment continues to get shorter due to cost pressures and these hospitals have to concentrate on carrying out the primary therapies, the need for rehabilitation in the area of oncology is increasing. Many patients experience a lack of attendance after the completion of the acute therapy. Insecurity, fear and depression set in. This is the point at which rehabilitation should begin with the aim of complete social integration.

Essentials of efficient oncological rehabilitation

Oncological rehabilitation rests on four pillars:

1. Acceptance and handling of organic failures
2. Reassessment and, if necessary, lifestyle adjustments
3. Psychological stabilisation
4. Social and occupational reintegration

Acceptance and handling of organic failures

Tumour therapy can cause organic failures such as removal of a breast, an artificial anus, nerve irritations as a result of chemotherapy, skin changes as a result of radiotherapy and such like. The majority of the failures are permanent, which means accepting a new physical feeling and learning to live with it. Failures such as peripheral polyneuropathy, which frequently arises after chemotherapy, and other symptomatic pain syndromes can be improved by physiotherapy, occupational therapy and specific medication-based approaches.

Reassessment and – if necessary – lifestyle adjustments

Aerobic physical exercise therapy, a diet to reach a normal weight and the reduction in cancer-promoting substances (e.g. smoking) are the most important aspects here. Numerous studies have proven that exercise therapy has a positive effect on overcoming cancer; with some kinds of cancer such as breast cancer and colon cancer, the risk of recurrence could even be reduced. In a study in 2005, Holmes and colleagues showed that specific physical exercise measures could reduce the recurrence of breast cancer by 50% [3]. Wolin et al. showed in 2009 that the risk of getting colon cancer is reduced by 24% by regular exercise [4]. Meyerhardt and colleagues proved that also in terms of secondary prevention, physical activity has a significant positive effect

Correspondence: Johann Klocker, MD, Psychotherapist, 1st Medical Department, Consultant for Internal Medicine, Specialisation: Hematooncology, General Hospital Klagenfurt, St. Veiter Strasse 47, 9020 Klagenfurt, Austria.
 E-mail: j.klocker@ipso.at

on the overall survival of colon cancer patients [5]. Chlebowski et al. showed that reducing weight improves recurrence-free survival of breast cancer patients [6].

Psychological stabilisation

After cancer treatment the psychological well-being of patients is usually seriously affected. Changed personal circumstances, a different physical identity, fear of recurrence and fear of encouraging recurrence by doing the wrong thing characterise this situation. The psychotherapeutic psychoeducational area is therefore a further important focus in oncological rehabilitation. Psychoeducational group therapy, individual counselling, relaxation exercises and visualisation therapies can help patients during this phase [2].

Illnesses that are associated with the expectation of a life-threatening outcome present a potentially psychologically painful situation and can lead to the development of severe psychological disorders. The diagnosis cancer is usually a heavy burden for those affected. It is especially traumatic because the threat does not come from the outside world but rather arises from inside one's own body. This psychological injury can cause anything from light symptoms such as anxiety, irritation or stress to physical pain, fear and panic and even to severe depression.

The aim of oncological rehabilitation is to recognise this psychologically painful situation and to counter it with specific measures. Important therapeutic steps include finding inner stability and developing a healing approach to one's own body. Music, arts and crafts therapy can be especially helpful here [2].

Another aspect is the development of personal resources. In rehabilitative care it appears to be important not only to see and treat the sick parts of a patient but also to encourage people to recognise and develop their healthy aspects, in the sense of strengthening a healthy core which exists in every living being [7]. Physical activity as well as creativity, social contacts, religion, philosophy, spirituality, relaxation exercises and visualisation therapy are all important ways of strengthening the healthy aspects in people [2].

Social and occupational reintegration

Social reintegration is promoted, on the one hand, by building up physical strength and, on the other hand, by coping strategies which increase self-esteem [8].

Occupational rehabilitation plays a more minor role in the oncological area. The majority of patients are not of working age anymore or have a strongly limited functionality because of their illness, which usually makes a return to work difficult. Early retirement is often the result, no doubt also due to the overall economic situation. According to the statistics of the Association of German Pension Insurance Companies, cancer is the fourth most common cause of retirement for men and the third most common cause for women [9].

Reintegration into employment, especially of patients of working age, is an important challenge in oncological rehabilitation. In addition to building up physical strength and treating the side effects of the therapy, motivation plays a major role in occupational rehabilitation, whereby the motivation for the employer on the one hand and the rehabilitation patient on the other hand is different.

The prospect of a future, overcoming the illness and reducing fear, in addition to psychological and physical stabilisation, plays an important role in the motivation to re-enter employment [10].

Admission to specialized centres such as the Humanomed Centre in Austria, where all these four aspects of oncological rehabilitation are taken into account, assists patients in complete remission to develop and exercise their individual rehabilitation concepts.

The Humanomed Centre Althofen, Althofen, Austria, offers oncological rehabilitation since November 2010. In the course of this rehabilitation process, patients who are in complete remission after completing a primary therapy undergo a 3-week programme with the aforementioned foci. A continuous evaluation of the success of the rehabilitation is carried out in cooperation with the University of Vienna. The Centre is the first oncological rehabilitation facility in Austria which has a direct payment agreement with the pension insurance fund.

Conclusion

Oncological rehabilitation is a multifactorial process that has to involve not only physical measures supporting patients to cope with their cancer- and therapy-related bodily failures but also psychological approaches to help patients regain their inner stability. Further parts of the rehabilitation should be possibly necessary lifestyle adjustments as well as guidance on how to reintegrate socially and occupationally. Specialized centres such as the *Humanomed Centre* in Austria assist patients in complete remission to develop and exercise their individual rehabilitation concepts.

Conflict of interest

The authors declare that there is no conflict of interest.

References

- [1] Statistisches Jahrbuch Österreichs. Statistik Austria, Vienna; 2010. Chapter 3, Health.
- [2] Hartmann MS. Therapiekonzepte und Anleitungen für Patienten zur psychosozialen Selbsthilfe bei Krebserkrankungen. In *Praktische Psychoonkologie*. Munich: Pfeifer Publisher, pp. 134–72, 1991.
- [3] Holmes MD, Chen WY, Feskanich D, Kroenke CH, Colditz GA. Physical activity and survival after breast cancer Diagnosis. *J Am Med Assoc*, 293(20): 2479–86, 2005.
- [4] Wolin KY, Yan Y, Colditz GA, Lee I-M. Physical activity and colon cancer prevention: a meta-analysis. *Br J Cancer*, 100(4): 611–6, 2009.
- [5] Meyerhardt JA, Giovannucci EL, Holmes MD, et al. Physical activity and survival after colorectal cancer diagnosis. *J Clin Oncol*, 24(22): 3527–34, 2006.
- [6] Chlebowski RT, Blackburn GL, Thomson CA, et al. Dietary fat reduction and breast cancer outcome: interim efficacy results from the Women's Intervention Nutrition Study. *J Natl Cancer Inst*, 98(24): 1767–76, 2006.
- [7] Haaf H G. Ergebnisse zur Wirksamkeit der Rehabilitation. *Rehabilitation*, 44(5): 259–76, 2005.
- [8] Bürger W. Psychosoziale Aspekte berufsorientierter Krankheitsbewältigung. In *Medizinisch-beruflich orientierte Rehabilitation. Grundlagen und klinische Praxis*. Hillert A, Müller-Fahrnow W, Radoschewski FM (Eds), Deutscher Ärzte-Verlag, Köln, pp. 80–90, 2009.
- [9] Heckl U, Weis J, Koch U. Berufliche Rehabilitation von Tumorpatienten. In *Krankheitsbewältigung bei Krebs und Möglichkeiten der Unterstützung*. Koch U, Weis J (Eds). Schattauer, Stuttgart; 1998. Chapter 3.4.3; p. 319–30.
- [10] Barth J, Gaspar M. Berufsorientierte Motivationsklärung – Stellenwert in der onkologischen Rehabilitation. In *Wissenschaftliche Grundlagen der medizinisch-beruflich orientierten Rehabilitation*. Mueller-Fahrnow W, Hansmeier T, Karoff M (Eds). Pabst Science Publishers, Lengerich; 2006. Chapter 3.2.6. *Onkologie/Pulmologie*; p. 263–8.