

PROCEEDINGS

DO OUTPATIENT REHABILITATION INTERVENTIONS IMPROVE THE FUNCTIONAL CAPACITY AND QUALITY OF LIFE OF COLORECTAL CANCER SURVIVORS?

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ABSTRACT

Colorectal cancer (CRC) is among the leading causes of mortality and morbidity representing a major public health problem. Globally, it is the third most commonly diagnosed cancer in male patients and the second in female ones. Internationally, its incidence is characterized by a wide geographical variation, with almost 55% of the cases being diagnosed in Western countries. In contrast, the incidence and the number of new deaths in Bulgaria, 28.5 and 2,687 (14.04), respectively, are still among the highest in Balkan countries and EU countries as well. Adenocarcinomas originating from epithelial cells of the colorectal mucosa comprise more than 90% of all CRCs. Other types of CRCs include neuroendocrine, squamous cell, adenosquamous, spindle cell, and undifferentiated carcinomas. Recently, the surgical treatment of CRC has made great progress. However, about 50% of patients relapse after treatment, indicating that improving the treatment of CRC with several rehabilitation interventions is still necessary. Rehabilitation is defined as the secret weapon in the holistic management of patients with cancers, aiming to restore mental and/or physical abilities, which might have been lost due to injury or disease, so that the individual is able to lead a normal or near-normal life. Cancer survivors and patients with terminal diseases are highly dependent on rehabilitation in order to optimize quality of life (QoL) and still preserve their dignity. Rehabilitation is an immanent team process that should be integrated throughout the oncology care continuum and delivered by a dedicated physical and rehabilitation medicine (PRM) team. There is an increased demand for a patient-centered approach, tailored to the CRC survivor's individual needs and wants, which will allow optimal physical, psychological, social, and professional functioning within the limits imposed by cancer and its treatment, as well as maximize the independence and QoL.

Keywords: colorectal carcinoma, six-minute walk test, quality of life, outpatient rehabilitation intervention

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INTRODUCTION

Colorectal cancer (CRC) is estimated to be the third most common cancer globally, with more than 1.9 million new cases and 930,000 deaths in 2020, presenting a significant burden to healthcare systems (1). Both, the incidence and mortality rates of CRC in Bulgaria are among the highest in Balkan and EU countries, 28.5 and 2,687 (14.04), respectively (2). Despite the recent advances in the surgical treatment of



CRC, the functional capacity (FC) and quality of life (QoL) in approximately 50% of CRC survivors remains poor.

AIM

The aim of this article is to evaluate the improvement of FC and QoL in Bulgarian CRC survivors from the region of Plovdiv, using an outpatient cancer rehabilitation protocol (CRP).

MATERIALS AND METHODS

A total of 33 Bulgarian CRC survivors from the region of Plovdiv were included in our single-arm observational study and were assessed for FC levels and QoL. The 6-minute walk test (6MWT) (3), and the European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire Core 30 (EORTC QLQ-C30) were applied to evaluate FC and the QoL of CRC survivors (4) at the 1st and 3rd months after outpatient CRP. The assessment was conducted in Fifth Diagnostic and Consultation Center in Plovdiv, Bulgaria.

RESULTS

The mean age of CRC survivors who participated in our study was 58 years, with 44% of them being female. The CRC stages were I–III. The participants had had CRC surgery before enrollment and an outpatient CRP had been conducted in the 1st month after surgery. Colorectal cancer survivors covered a distance of 534 ± 52 m during 6MWT at an average intensity of $81.3 \pm 7.6\%$ of HRmax, while the mean EORTC-QLQ-C30 score was 49.2 points (45.6–52.9) and it significantly ($p < 0.001$) improved by 14.2 points until the 3-month follow-up reaching 63.4 (59.8–67.1) points.

CONCLUSION

Our observational study found that FC and QoL in Bulgarian CRC survivors from the region of Plovdiv were significantly improved and interconnected up to 3 months after outpatient CRP.

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