

Effectiveness of Physiotherapy intervention in patients suffering from Head and Neck Cancer

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Background: The purpose of this study is to investigate whether the extent of late sequelae symptoms (lymphoedema, decreased range of motion in the neck and shoulder region, speech and swallow disorders and reduced facial expression) due to radiotherapy treatment for head and neck cancer can be reduced by an individually adjusted physiotherapy effort applied immediately after the onset of and during radiotherapy treatment. Radiotherapy induced damage of the skin, lymphatic system, cartilage and bone often leads to symptoms such as , lymphoedema, decreased range of motion of the mouth, neck and tongue, difficulty in using the mimic muscles, difficulty in swallowing and pain. The severity of late side effects due to radiotherapy treatment for head and neck cancer often leaves the patients with a poor quality of life rating. Effects of physiotherapy interventions are scarcely investigated. Only few studies describe the effect of physiotherapy treatment. No studies have described the effects of physiotherapy intervention for patients undergoing treatment for head and neck cancer

Methods: Fifty head and neck cancer patients were assigned randomly to standardized therapeutic exercise protocol for 12 weeks. The primary outcome measure was change in patient-rated shoulder pain and disability from baseline to post intervention. Secondary outcome measure were upper extremity strength and endurance, range of motion, fatigue, and quality of life.

Results: On the basis of intention-to-treat analyses, exercise programme for improving shoulder pain and disability

(95% confidence interval $P = .001$), upper extremity strength (92% $P = .001$), and upper extremity endurance ($P = .001$). Changes in neck dissection impairment, fatigue, and quality of life favoured the therapeutic exercise group .

Conclusions: The Physiotherapy program significantly reduced shoulder pain and disability and improved upper extremity muscular strength and endurance in patients suffering from Head and Neck Cancer. Clinicians should consider the addition of physiotherapy in the cancer rehabilitation of postsurgical head and neck cancer patients.

Keywords : Head neck cancer, Physiotherapy, shoulder pain , shoulder disability.

Biography

Shailendra Kumar Mehta is working as a Principal in the Department of Physiotherapy at JRN Rajasthan Vidyapeeth, Udaipur, India. He has founded SHECR and Social Welfare Foundation and trained broad horizon of lymphedema management to 1000 physiotherapists and students. He has presented 32 research papers and published 30 articles. He has authored a book entitled "Management of Lymphedema" and developed a new technique for the management of lymphedema. He has been awarded with 15 prestigious awards. He is Editor In Chief of International Journal of Physiotherapy and Cancer Rehabilitation. His areas of specialization are Cancer Rehabilitation, Lymphedema Management, etc.