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Abstract

The Effect of Virtual Reality Based Rehabilitation on Kinesioophobia, Pain and Satisfaction in Patients with Knee and Hip Surgery

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Abstract:

Purpose :Virtual reality-based rehabilitation practices are considered as a complementary treatment approach. Virtual reality has been used as a complementary to the standard conventional program for the treatment of orthopedic disorders such as total knee and hip arthroplasty and anterior cruciate ligament reconstruction surgery. The aim of this study is to determine the effect of virtual reality-based rehabilitation on kinesio-phobia, pain and satisfaction in patients who have undergone knee and hip surgery.

Method: The study included 3 volunteer patients (2 female and 1 male) with a mean age of 62.6 (50-75) who underwent hip and knee surgery at Baskent University Istanbul Health Practice and Research Center Hospital. Age, height, body weight and the number of days after the operation were recorded before treatment. 15 minutes of virtual reality based rehabilitation was applied to patients with MarVAJED device. The evaluation was performed with VAS, Tampa Kinesiophobia Scale and Treatment Satisfaction Questionnaire. VAS and Tampa Kinesiophobia Scale were administered both before and after treatment.

Conclusion: The pre-treatment Tampa Kinezophobia score was 38.3 and decreased to 36.6 after virtual reality-based rehabilitation. Patients had moderate kinesiophobia according to the Tampa Kinesiophobia scale. The

VAS score was 4.2 in the first measurement and 3.3 in the last measurement. All three participants found MarVAJED to be more effective than other treatments. Treatment satisfaction mean level was 9.3 out of 10 points.

Discussion: During virtual reality-based rehabilitation, patients ignored post-op kinesophobia and pains because they focused on in-game goals.Therefore the movement was observed at wider angles. With the inclusion of virtual reality-based therapy in the treatment program of the patients, we think that the patient's participation and adherence to the treatment will be at the highest level and the treatment will give better results.

Biography:

Gökçe Kartal graduated from the department of physiotherapy and Rehabilitation in June 2018. She is currently doing a master's degree at Marmara University.

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