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PHYSICAL REHABILITATION OF PATIENTS WITH SPASTIC FORM OF CEREBRAL PALSY USING PORTABLE POWER PLATE EXERCISES

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Annotation. Physical rehabilitation of patients with spastic hemiplegia, which is a form of cerebral palsy (CP), is an important aspect of their treatment and care. Spastic hemiplegia is characterized by loss or limitation of motor function on one side of the body, which can significantly limit the patient in his daily activities.

Purpose of the study. The use of portable Power Plate exercise machines can be useful in the physical rehabilitation of patients with spastic hemiplegia cerebral palsy. The Power Plate is a vibration therapy machine that creates vibrations that are transmitted through the patient's body. These vibrations stimulate the muscles and nervous system, helping to improve strength, flexibility, balance and coordination.

Materials and methods. The main advantages of using portable Power Plate exercise machines in the physical rehabilitation of patients with spastic hemiplegia cerebral palsy include:

Improved Muscle Strength and Flexibility: Vibration therapy provided by the Power Plate can help strengthen and develop muscles on the weak side of the body. Regular training using a machine can help improve muscle strength and flexibility, which in turn can increase the patient's functional mobility and improve the performance of daily tasks.

Improved Balance and Coordination: The vibration stimulation received from the Power Plate can help improve a patient's balance and coordination. This is especially important for patients with spastic hemiplegia who experience incoordination on the weakened side of the body. Regular training on the Power Plate can help improve a patient's motor control and stability.

Results. Improved quality of life: Physical rehabilitation using portable Power Plate exercise machines can lead to significant improvements in the quality of life of patients with spastic hemiplegia cerebral palsy. Increasing strength, flexibility, balance and coordination can lead to more independent functioning and better ability to cope with daily tasks.

However, it is important to note that the use of Power Plate portable exercise equipment in the physical rehabilitation of patients with spastic hemiplegic cerebral palsy should be under the guidance and supervision of a qualified professional such as a physical therapist or rehabilitation specialist. Individual approach and patient safety are priority factors when using Power Plate exercise machines. A rehabilitation specialist will be able to develop an individual training

program, taking into account the characteristics of each patient, and ensure that the exercises on the simulator are performed correctly.

In conclusion, the use of portable Power Plate exercise machines in physical rehabilitation of patients with spastic hemiplegic cerebral palsy may be beneficial in improving strength, flexibility, balance and coordination. However, it is necessary to consult a professional to obtain a personalized assessment and training program to ensure safe and effective use of the Power Plate.

Objects and methods of physical rehabilitation of patients with spastic hemiplegia cerebral palsy using portable Power Plate simulators may include the following aspects:

Patient Assessment: Before physical rehabilitation begins, it is important to assess the patient's functional status, including assessment of motor skills, muscle strength, flexibility, balance and coordination. This allows us to determine the individual needs and goals of each patient.

Planning an Exercise Program: Based on an assessment of the patient's condition, a physical therapist or rehabilitation specialist can develop an individualized exercise program that includes the use of portable Power Plate machines. The program may vary depending on the patient's goals, such as improving muscle strength, flexibility, balance, or coordination.

Using Portable Power Plate Trainers: Portable Power Plate trainers usually have different vibration and frequency settings. They can be used for a variety of exercises and movements, including exercises to strengthen muscles, improve coordination and balance. Exercise machines can be used alone or in combination with other forms of physical therapy.

Use of Specific Exercises: Physical rehabilitation for patients with spastic hemiplegia cerebral palsy may include specific exercises designed to improve muscle control, flexibility, balance, and coordination. These exercises can be adapted for use with Power Plate machines to stimulate the muscles and nervous system more effectively.

Systematic and Progressive: It is important to follow a systematic approach to physical rehabilitation, including regular training using portable Power Plate machines. Progressive increases in training intensity and difficulty can be applied as the patient's condition improves.

Comprehensive Physical Therapy: In addition to the use of portable Power Plate machines, physical rehabilitation for patients with spastic hemiplegia cerebral palsy may include other methods such as muscle strengthening exercises, stretching, massage and physical therapy. An integrated approach can provide the best results.

It is important to note that the use of Power Plate portable exercise equipment in the physical rehabilitation of patients with spastic hemiplegic cerebral palsy should be carried out under the guidance and supervision of a qualified specialist, such as a physical therapist or rehabilitation specialist. They will be able to determine the most appropriate exercises and machine settings for each patient, and ensure that the workouts are safe and effective.

The results of physical rehabilitation of patients with spastic hemiplegia cerebral palsy using portable Power Plate simulators can be as follows:

Improved muscle strength: Using portable Power Plate exercise machines can help strengthen muscles, especially in the paralyzed side of the body. Regular exercise can help increase muscle strength, which in turn can improve the patient's ability to perform motor tasks.

Improved Flexibility: Portable Power Plate machines can be used to perform stretching exercises and improve the flexibility of muscles and joints. This is especially important for patients with hemiplegia, who may experience stiffness and limited movement.

Improve Balance and Coordination: Power Plate Vibration Trainers can be used to train balance and coordination. Regular exercise training can help patients improve their ability to maintain balance and perform movements more accurately.

Improving activities of daily living: The goal of physical rehabilitation for patients with hemiplegic cerebral palsy is to increase their ability to live independently and perform daily tasks. Using portable Power Plate exercise machines can help patients develop essential physical skills and increase their independence.

Improving quality of life: Physical rehabilitation, including the use of portable Power Plate exercise machines, can lead to improved quality of life for patients with hemiplegic cerebral palsy. Improving physical function and independence can reduce the limitations that patients experience in their daily lives.

Conclusions. It is important to note that the results of physical rehabilitation may vary depending on the individual characteristics of the patient, the degree and characteristics of spasticity, as well as the regularity and quality of training. Therefore, it is important to carry out rehabilitation under the guidance of a qualified specialist and adapt the training program to the individual needs of each patient.

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