

EXPERTISE



by
Univ. Prof. Dr. Hans Tilscher
&
Dr. Christoph Michlmayr

SOS-Körper * ÖÄGMM * VPWS
Neurologisches Zentrum Rosenhügel
1130 Vienna, Riedelgasse 5



Conservative-orthopaedic preliminary remarks!

In keeping with nature's principle of economy, all organs that are not used will atrophy.

Corresponding activation stimuli, which allow the body parts to fulfil their planned functions, counteract this law of nature.

The human locomotor system, which encompasses most of the body, is particularly susceptible to this law which relies on activation and otherwise responds with a general drop in performance along with complaints, aging processes and vulnerability to diseases.

The hand as part of the upper extremities is a valuable source of impulses for the entire body. Merely clenching the fists tones the hands, while letting them fall detones.

The hands, as well as the remaining parts of the locomotor system, transmit important information to the central nervous system which initiates, controls, monitors, verifies and terminates the motor activities desired by us, using the sensorimotor system in order to conduct essential physical activities.

Simply grasping the training device – the grip is an ancient reflex – has an impact on tone, and not just for the upper half of the body.

The composition of the ring-shaped device with its contents amplifies sensory input (perceptible signals) regardless of the movement type, thereby training a unit of the locomotor system that may only be perceived as a side effect but constitutes a prerequisite for physical movement:

the generation of stimuli and their life processes that are correct for the respective movement and correspond to the functional needs of the locomotor system.

This means the target group for the use of "Smovey" devices includes people for whom sensorimotor functions, and therefore also dexterity and coordination, are of particular importance even in the face of aging.

"SMOVEY" – Vibroswing

The Smovey is a straightforward, effective training tool and perhaps even a therapeutic device.

The Smovey Vibroswing is a swing ring system consisting of a spiral tube, 4 steel spheres and a handle system with damping elements.

As an orthopaedic specialist, I have put the Smovey to the test and wish to report on my experiences, both with tests conducted on myself and with the application to other people, especially women.

The use of the Smovey is extremely straightforward and intuitive. It awakens an almost childlike interest in novelty and stimulates the play instinct, even among adults. All the people to whom I gave this device started playing with it immediately. Extensive training was not required. One intuitively tries to find the rhythm for the proper use of the Smovey.

An almost reflexive correction of posture can be observed while walking with the Smovey. ***Naturally, this is particularly pleasing for the orthopaedist.*** The normally protracted explanations of the active principles can be quickly implemented in practice, and work practically by themselves when people use the Smovey.

Whether this is due to the vibration that is generated in the handle (which would be an achievement of the nervous system), or whether it is simply a reaction to the centrifugal mass – both concepts are conceivable.

What is important, however, is the posture and movement correction effect which works practically on its own with very little effort.

In summary, the following positive aspects can be identified from an orthopaedic perspective:

A better posture, which is associated with reduced strain on the spine during movements, is easy to achieve with the Smovey. Strain on the peripheral joints is also alleviated, since their degree of centring is improved. This is of particular importance in the shoulder region.

The conscious perception of movement, since the Smovey only begins to work well by gradually approaching the correct movement pattern.

Awareness of your own movements is surely the first therapeutic step, especially for the locomotor system. Improved proprioception can therefore only be viewed positively.

Additional insights:

The Smovey supports a wide variety of different exercises.

Motivated by my observations, I naturally sought and tested additional applications. As an active athlete and especially a tennis player, I enjoy the rhythmic mobilisation which is possible with the use of the Smovey thanks to the centrifugal mass and movement.

Improving the ability of the spine to rotate, which appears ***particularly interesting and helpful for tennis players and golfers***, is possible with this training device. The Smovey can also help realise improvements in movements above the head, which are used by tennis players during the serve or smash. Positive results in the area of prevention for the most frequent types of injuries, e.g. for a tennis player (spine and shoulder), are therefore surely conceivable.

Mobilisation exercises in the field of shoulder therapy are also conceivable. These could complement physiotherapy concepts, both in working with the therapist and in exercises completed by the patient at home.

In the interest of body action, a type of ***massage, for example in the back region, also appears like an interesting application***. On the one hand, this constitutes very pleasant ***independent therapy*** and, on the other hand, it serves as a pleasant ***introduction to training with groups of all ages***.

All in all, it appears that an ***innovation and improvement in the fitness market*** has been developed.

From an orthopaedic perspective, it appears desirable for the Smovey to be popularised and used by the corresponding people.

New and interesting areas of application will surely be found.

Its uncomplicated use and easy handling ***as well as the convenient size make this device appear highly suitable***.

As orthopaedists, we were unable to find ANY disadvantages associated with using the Smovey. All activity can be viewed as positive, and it appears that a highly enjoyable new opportunity has been created here.

Univ. Prof. Dr. Hans Tilscher

Dr. Christoph Michlmayr