

## **Relaxation as a Part of Compensation**

This chapter deals with the role of regeneration in general, as a part of a successful compensation process following the training workload.

Relaxation is also considered to be a component of dynamics, opposite to movement, as it is understood as a certain inaction in the muscle work. This inaction, that may be sometimes very short, takes place especially where sequences of movements occur. Relaxation is not a passive process. It is a certain level of nervous activity inhibition, which can be reached either by increasing the activity of specialized nerve inhibitor connections, or by decreasing the number of nerve impulses. In fact, it is an active process, and thus we must learn how to relax as we learn how to practise a muscle contraction – movement.

To relax muscles we need to decrease conscious movement-provoking effort and assume a body position so that the muscles maintaining the body posture against the gravity are engaged as least as possible. Effective relaxation is also supported by adequate psychic condition, feeling free from stress, worries and anxiety. There are many relaxation methods and techniques, all of them are subject to the laws of neurophysiologic processes. For instance, proper respiration technique may induce relaxation through the breathing rhythm reflexively and independently on our conscious control. Breathing in and holding breath stimulates activity in the movement system, and, conversely, breathing out enables relaxation and rest. Spreading relaxation to other muscle groups is also one of physiologic laws. When relaxation of a given muscle has been induced, the relaxation spreads to the neighboring and remote muscles.

Relaxation can also be induced and influenced through various physical exercises and techniques. Jacobson's muscle relaxation method is one of the known techniques based on perceiving the muscle tonus resulting from muscle contraction (caused by transmission of the nerve impulses to the muscles) and perceiving the inhibition resulting from relaxation. Another type of relaxation-concentration methods is autogenic training by Schultz. It is a modification of the oldest Yoga method, Yoga Nidra. It is a method open to the European mentality and is practiced very often.

Another method supporting the after-load relaxation is massage, or alternative massage techniques. Fatigue reducing massage will not be dealt with here, since the focus is on alternative approaches, applied very effectively after workload in sport or everyday life. It concerns a principle of relaxation through touching, not with hands but with a tennis ball. Its success is conditioned by sensitivity and responsiveness to touch. Touching is a specific phenomenon. It is a delicate art we can treat with, reduce stress and relieve pain. Our perception of being touched also reflects our self-esteem and self-confidence. It is often the ball massage that makes an individual (whether an athlete or a woman working in the office) realize how much strained his or her muscles were and how the real relaxation feels. Fatigue, problems with the movement system or tight and sore body parts are not merely associated with the competitive and recreational sports. These are problems familiar to anyone with a sedentary lifestyle, people who sit at the computer or stand all day long. In competitive sport, this kind of massage improves relaxation after training or competition. Thus it keeps the athlete motivated for the next training practice and improves the quality of the whole compensation process.

*The principles to observe are as follows:*

- *No massage in places where bone is right under the skin*
- *No massage of groins, armpits and under knees and elbows*
- *No massage in case of skin disease*
- *No massage after a serious injury*
- *No massage in case of blood circulation trouble., virus diseases and fever*
- *Make sure your patient wears tight clothes*
- *Pressure in Centripetal fashion is higher (oriented toward heart)*
- *Find what your patient finds pleasant*
- *Body parts you massage must be relaxed*
- *Massage of each area lasts around 5 min.*

Following illustrations show procedures and positions of hands on various parts of body.