

Fascial tissue

The term “fascia” might be unknown to some. The day-to-day word “connective tissue” sounds more familiar to most of us.

It can be found throughout the human body as well as animals. Our body would have no form, stability or flexibility without the cohesive and structured fascial tissue. It keeps all organs and body parts in the right place. At the same time, it is very flexible so that certain shifts are possible, e.g. when breathing, digesting or during a pregnancy, without losing the general order within the body.

Besides its supporting and connective function the fascial tissue is also a pathway and communication system for numerous metabolic and regulation processes. Due to its vast number of sensory receptors and nerve cells which are continuously sending sensory impulses to the brain, the fascial tissue is also called a “sensory organ”. Further, it supplies the cells with nutrients and is responsible for the removal of waste products.

The main components of the fascial tissue are collagen fibers, water and various adhesives. Its high water-binding capacity serves as an indispensable water reservoir.

Fascial tissue can stiffen and adhere

With increasing age the water proportion of the body decreases, and in turn the fascial tissue suffers from this.

If the balanced ratios of fiber and water proportions change, respectively the water-binding capacity decreases, and the ratio of firm and inflexible collagen fibers grow. The fascial tissues adhere to one another, the mobility of the muscles gets more and more restricted & bending and stretching the joints becomes more painful.

As a result of which, the organs are no longer supplied with sufficient nutrients and the waste products can no longer be removed effectively. That means both the blood and oxygen supply to the organs is also affected.

In the case of hyperacidity of the body, a misbalance of the acid-base ratio, the entire organism is affected; therefore also the fascial tissue. Since the fascia is permanently and directly in contact with the extracellular fluids in the body, this tissue is the first one to suffer from hyperacidity. Blood and lymph flow also affects the muscle activity. Inflammations form in the whole body.

Even the nerves and receptors wrapped in fascial tissue are irritated by the excessive acid and can cause undefined pain in different areas of the body.

Inactivity or one-sided strain changes the structure of the fascial tissue as well. For example activity mainly being carried out in a sitting position will eventually lead to neck, shoulder and back pain. And when we are in pain/discomfort the natural reaction of the body would then compensate by changing the posture once more, and this then leads to further symptoms in other areas of the body.

Under stress the body releases specific hormones like Cortisol and Adrenalin which lead to an increase of tension of the fascial tissue. This is an unconscious chemical reaction in the body and has nothing to do with an intentional muscles contraction which normally creates an increasing tension of the fascial tissue.

In case of chronical stress the fascial tissue remains in a permanent tension. Like a tensed rubber band; the tissue loses its elasticity and will eventually stiffen.

It is not only damage to the tissue that leads to pain; also due to other reasons, tension of fascia always has an effect on the tissue in other parts of the body.

However, overstretched, damaged or firm fascial tissue cannot be shown on x-rays. For this, it is necessary to take a look at the overall situation in the body – starting from the body static, and potentially due to nutritional aspects.

But there is hope!

Even though the fascial tissue changes slowly, it can perfectly be trained. Soft and dynamic training methods like Yoga, Pilates, Tai Chi or Qi Gong are perfectly suitable.

With a fascia roll made of rigid foams the tissue can be intensively massaged. Regular training will stimulate the cells to replace the old collagen fibers with new ones. Basically, any activity improves the blood circulation and the oxygen supply of the cells.

An adjustment of the nutrition can further contribute significantly to sustainable success.

So, don't just accept inexplicable pain – get active!