

Your back is giving you pain, your knees crack and you've been feeling this pull in your shoulder for a number of days...

Pains of the musculoskeletal system are among the most common complaints in western industrial societies. The cause is usually wear and tear of the joints.

Arthrosis, a degenerative disease of the joints, is one of the rheumatic diseases. It is the most frequent of rheumatic diseases (approx. 55 %). Unlike arthritis, arthrosis is not accompanied by inflammation of the joints, but they are worn down.

Our joints make it possible for us to move. We carry out many thousands of movements during the day, usually without being aware of them. These movements are improved and facilitated by the synovia. This film of fluid is formed by the inner mucous membrane of the joints. The older we get, the more watery becomes the joint fluid that nourishes the cartilage, while it is still viscous when we are young. If the joint no longer has sufficient "lubrication", the cartilage becomes brittle and crumbly and wears down in the course of time. As an elastic shock absorber, however, the cartilage has a central function in the joints and forms the sliding surface for the harder bones.

As we get older we therefore run an increased risk of being afflicted by arthrosis. While only 4 % of 20-year olds suffer from arthrosis, 70 % of people over 70 suffer from this disease. Women are more frequently affected and as the cartilage is particularly vulnerable to wear and tear, the starting point of every arthrosis is damage to the cartilage, something which can have multiple causes:

Advanced age

From about the age of 35. the body's automatic powers of regeneration start to decline. Most widespread is wear and tear of the joints over many years, resulting in "arthrosis in old age". Preventative measures therefore need to be taken even when we are very young: attention should be paid to getting more movement in our leisure time, active breaks during schooldays and chairs with proper support for the back in nurseries and schools. Training for the back also makes sense for children as it is the mistakes made in the first 20 years of life that can be decisive for later symptoms of wear and tear.

Body weight

Being weight plays a particularly important role in the case of arthrosis of the knee, as the body's entire weight also presses on the bones connected through the joints.

Congenital factors

Certain types of arthrosis can be caused by congenital factors (e.g. at the finger joints).

Excessive strain

Congenital deformations (e.g. of the hip), excessive strain (e.g. in the case of top sportspeople or bad posture when sitting at the work place workplace) or faulty loading due to unsuitable shoes (e.g. with stiletto heels) put excessive strain on the joints due to an unnatural malpositioning of the bones.

Injuries, accidents, knocks or blows

Even micro-injuries, as they sometimes occur in sport, but also fractures of the bone can promote the development of arthrosis.

Human beings have around 200 joints (connecting the bones). In principle arthrosis can occur in all the joints. The most common places are the spine, the shoulder, the elbow, finger, knee and ankle joints and also a bunion deformity of the big toe, known as hallux valgus.

We speak of polyarthrosis or multiple arthrosis when the arthrosis occurs simultaneously at all the joints. Arthrosis is also a very common disease among animals. The most well known are hip problems in "man's best friend", i.e. dogs.

Progression of the disease and symptoms:

The development of arthrosis starts with damage to the joint cartilage. It occurs gradually and unnoticed and its progress is slow at first. An initial discomfort at the joint can turn into heavy pain, usually over the course of many years. In addition there can be changes around the bones close to the joint, in the mucous membrane of the joint and the joint capsule and also in the musculature.

The joint capsule itself is not sensitive to pain. This is why we do not notice the pain until later. Depending on the type of joint affected and the phase of the disease, the consequences are very different: inflammations of the joint, thickening and deformation of the affected joint, slight restrictions in movement going as far as stiffening. These restrictions on movement trigger a vicious circle, where the decreasing mobility of the joint causes a further decline in the viscosity of the synovia and thus less and less protection of the cartilage.

In addition the pain is intensified by cold and damp weather and by strain. Sudden strain, such as walking down steps, is painful for someone suffering from arthrosis of the knee joint. Cycling, on the other hand, does not usually cause any problems. Another typical symptom of arthrosis is what is known as "initial pain" on movement. This means that the first movements are painful after the joint has been resting for a longer period of time and the symptom only abates after walking a few metres.

If you suffer from pain, then please take your body's signals seriously. Once a defect occurs in the case of arthrosis it is incurable. It is therefore one of the primary aims of arthrosis therapy to alleviate existing pain so that mobility is possible again and therapeutic gymnastics can be performed. Ask your doctor or chemist for advice, for the treatment of arthrosis and other rheumatic diseases goes way beyond the deadening of pain.

However there is no therapy for arthrosis that can remove the cause. Although there is a large number of bone-building preparations on offer, there is not yet any scientific evidence of their effectiveness. The ultimate therapy for arthrosis is often an artificial joint replacement, i.e. a total endoprosthesis (TEP). This is carried out most frequently on the hip and the knee joints. The right time for an artificial hip replacement in the case of arthrosis is decided by the pain suffered by the patient and the opinion of the consultant.

Did you know

- that a human being loses 40 % of his or her muscle mass between the ages of 20 and 70?
This reduces the stabilisation and support of the joints by the muscles.
- that the joint capsule at the large joints is only about 3 - 5 millimetres thick?
- that the cartilage in a healthy joint has sliding properties that are 5 times better than those of ice?