

Shoulder pain is an illness patients most often complain about when they see their orthopaedists. Shoulder pain can prevent us from normal functioning and doing the most simple activities. The shoulder is built of a few structures that cooperate with one another:

the sterno clavicular joint, the acromio clavicular joint, the scapulo humeral joint, the subacromial space and the scapulo costal space. It's enough for one of the structures to malfunction and the shoulder has problems with functioning. The most common pathologies are:

- subacromial impingement,
- rotator cuff injuries,
- instability of the scapulo humeral joint,
- tears of the tendon of the long head of the biceps muscle,
- frozen shoulder,
- osteoarthritic changes of the acromio clavicular joint,
- osteoarthritic changes of the scapulo humeral joint,
- snapping scapula.

There're many reasons of pain ailments, starting from falls, injuries and overburdening (while doing sports), through sudden lifting of a heavy object or a long term immobilization to incorrect positioning and sitting lifestyle, which weaken the muscles of the shoulder girdle. The changes in the shoulder are also caused by the weakening of the immune system due to a long term stress, inflammation, having a cold or cooling of the body/shoulder and arm and/or due to an infection which has not been treated completely.

Shoulder also affects drivers who, while driving, keep their arm close to the open window and people who don't tolerate draughts or sit by the window or when we change the temperature.

Painful shoulder syndrome

There're three stages of the painful shoulder syndrome. It starts with the inflammation of the bursa and the pain appears with the shoulder overburdening. Later there's the inflammation of the joint capsule and ligaments. Finally, there appear injuries of the rotator cuff and the tendon of the long head of the biceps muscle. We feel constant pain; the pain is so intense that it prevents us from sleeping, raising the arm or making rotational movements.

The cause of pain lies in tendonitis, also in the inflammation of the joints and bursae and, finally, in fractures and injuries. People who suffer from the painful shoulder syndrome can't at all of fully perform active and passive motions and the limbs are significantly weakened.

It's important to diagnose the painful shoulder syndrome correctly, because the same ailments are found in spondylo arthrosis of the cervical spine and heart diseases. The diagnosis is based on a thorough interview, thorough doctor's examination, an X-ray of the cervical spine and the shoulder, an ultrasound and MRI tests.

[Painful shoulder syndrome - treatment \(find out more\)](#)

Frozen shoulder

Unfortunately the name "frozen shoulder" doesn't mean the patient has stayed in the frost for a long time and his/her shoulders froze or that he/she's been treated with low temperature. This is a name of an illness during which the capsule of the shoulder shrinks.

This is why the name "frozen shoulder" is used to describe the contraction of the humero scapular capsule.

This shrinking of the capsule means the capsule will thicken, which leads to the decrease of the scapulo humeral joint volume and a significant limitation of mobility, which may be total.

Reasons

To be honest, the cause of the illness is not known. Everybody is to take up the risk, especially women at the age between 40-60 and young people who do sports intensively. The illness may occur due to a tiny injury. The illness may be caused by a tendonitis or the shoulder bursitis. Atypical, yet often frequent reason of "freezing the shoulder" is mental trauma.

We can fall down with the frozen shoulder also because of diabetes, peripheral vessels' illnesses, weak physical condition or a sedentary lifestyle. We cannot neglect even small injuries of the shoulder or forget about the recommended treatment of the bursitis or tendonitis in the shoulder area. Unfortunately, the disease can also be caused by joint immobilization due to other reasons. Here the mechanism is simple: if the joint isn't used for about 7-10 days, adhesions limit the already existing limitation of motion to a greater extent. In a few weeks the adhesions become so big that they block the motion completely.

Symptoms

The disease can be shortly described as follows: it's a disease of the shoulder with increasing pain and progressing joint stiffness. The disease can spread from the articular capsule onto the tendons in the shoulder area, bursae, muscles, blood vessels and nerves. We observe:

- increasing shoulder pain from a minor to a difficult to handle,

- shoulder stiffness, felt even during sleep and at the time of physical inactivity,
- any motion of the patient increases the pain,
- the feeling of friction or snapping during shoulder motion,
- pain of the arm or neck.

[Frozen shoulder - treatment \(find out more\)](#)

Rotator cuff injuries

The cuff, that is a ring of rotators, consists of the tendons of the subscapular, supraspinous, subspinous and tubular muscles. They surround the head of the humeral bone. Their job is the external and internal rotation and proper control of the limb abduction - the muscles of the cuff control the position of the head of the humeral bone, which should be at the acetabulum. It's very important because the strong deltoid muscle draws the shoulder upwards with a lot of force. This causes a conflict between the humeral bone and the acromial process.

The reason of the rotator cuff injury is, most frequently, a long lasting friction of the tendons against the acromial process (the so-called subacromial conflict). This compression of the tendons together with the inflammatory process lead to tear of the tendon, to tear off the rotator cuff. It often happens as a result of an injury or work that requires raising shoulders or multiple repeated microinjuries or, finally, anatomic differences of the acromial process. If the rotator cuff isn't torn off completely, we deal with a partial injury of the rotator cuff.

Symptoms

The main symptom of the rotator cuff injury is severe pain, often felt at night. The function (motion capability) is also greatly limited. We may observe skipping in the joint and atrophy of muscles in the shoulder area. Surely, elements of motion that directly depend on the function of the injured tendon, are impaired the most. Most commonly this is a case of the supraspinous muscle, which can be easily diagnosed when we see the problems with abduction of the limb (raising it to the side).

[Rotator cuff injury - treatment \(find out more\)](#)

Instability and recurring dislocation of the scapulo humeral joint

One third of all injuries of the scapulo humeral joint are dislocations. This illness affects almost 2% of people and is five times more common amongst men.

Dislocation is nothing else than the loss of contact of the joint surfaces (the head of the humeral joint, due to an injury, escapes from the acetabulum). This leads to severe joint damages, which, in turn, in 70% lead to instability and recurring dislocation of the joint.

If dislocation happens in young people, it usually comes together with disconnecting the labrum of the acetabulum (labrum is a "seal" that deepens the acetabulum), sometimes with the damage of the bone part of the acetabulum, even with an impact fracture of the head of the humeral bone (the Hill-Sachs' fracture). The articular capsule and the muscles stabilizing the shoulder from the front and behind are always damaged, too. The discontinuity of the labrum is called the Bankart's injury. In people of older age, dislocation is connected to the rotator cuff injury.

The symptoms of dislocation are as follows: deformity of the shoulder, forced limb position (no possibility to move) and strong pain.

Examination should include thorough doctor's check-up and an X-ray test.

If there're recurrences of dislocation or the ailments last long, the examination should be completed with an MRI and CT tests.

[Shoulder instability \(find out more\)](#)

Calcifying rotator cuff inflammation

When we talk about the subacromial illnesses, we must not forget about the calcifying rotator cuff inflammations (most often of the supraspinous muscle). Calcified tendinitis gives severe pain ailments. The cause is not known. Simply, there're concretions put aside or the damaged tendon is changed into calcifications. The ailments appear in a short period of time and they quickly lead to the limitation of the shoulder motion.

The diagnosis can be posed on the basis of the doctor's examination and a typical X-ray. When in doubt, we perform other imaging tests (MRI, CT).

[Calcifying rotator cuff inflammation - treatment \(find out more\)](#)

Written by: Konrad Malinowski