



# Orthopaedic surgery



## OSTEOARTHRITIS OF THE SHOULDER JOINT

Osteoarthritis is the most common chronic degenerative joint disease. Its characteristics are continuous loss of cartilage and deformation of the joint surfaces. The classic symptoms are pain at rest and during or after activities. The patients need analgetic and anti-inflammatory medication. The gradual loss of the range of movement is caused by the narrowing of the joint spaces and the development of bony appositions. This process can lead to almost complete stiffness. Finally, conservative treatment like physiotherapy or injections are useless and even arthroscopic interventions cannot improve pain and joint function any more at this stage.

### Joint replacement

We have seen a tremendous evolution for partial and total joint replacement of the shoulder over the last ten years. While total hip and knee replacement are very well established and a matter of daily routine in orthopaedic centers, joint replacement of the shoulder is still a sophisticated procedure and technically very demanding. However in advanced orthopaedic centers, excellent surgical skills will be combined with all the know-how and the latest technical equipment, which is needed for replacement of the shoulder joint. The replacement of the destroyed joint surfaces, either of the humeral head alone or in combination with the glenoid surface, is an excellent option in terms of pain relief and joint function. For the best possible result optimal timing of the operation is very important. Though it is possible to achieve good results even in late stages, patient and physician should not wait until the joint has ended up in complete stiffness and destruction of all the surfaces. Beside a degenerative disease like osteoarthritis some other pathologies like rheumatoid arthritis, osteonecrosis of the humeral head and severe forms of humeral head fractures may lead to joint replacement with high chances for a satisfactory outcome. For the specific needs of different diseases various prosthetic components are available.

### Rehabilitation

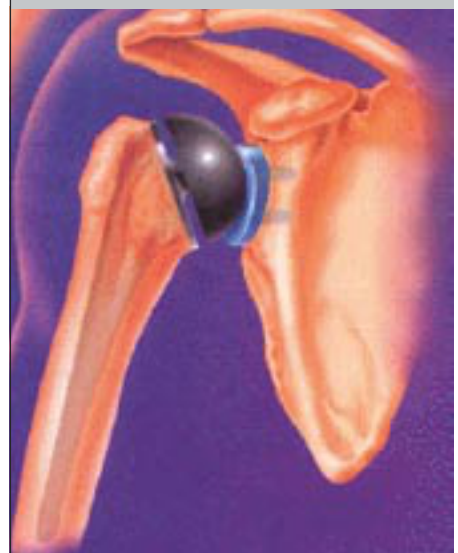
After an initial stay of 4 to 5 days in the hospital the patients are transferred to a rehabilitation center where they are treated as in-patients during 3 to 4 weeks. After this period of time physiotherapy is continued on an out-patient basis by specialized therapists. During the early postoperative phase the patients should wear a soft shoulder support which gives some protection against pain and mechanical stress. The after-treatment is always functional and begins at the first day after the intervention. The exercises for increased joint mobility will be intensified after 2 weeks, ideally as aquatherapy. Beside the specific physiotherapy, exercises for muscular reinforcement are started very early. All the patients are seen by their surgeon regularly. The whole team is devoted to a closed team work between surgeon, therapist and patient, which is mandatory for the best possible outcome of joint mobility, muscular strength and pain relief. (see pictures)



humeral head and glenoid  
left shoulder (rear view)



osteoarthritis humeral head



joint replacement right shoulder joint