

# Shoulder Arthritis

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The shoulder is a ball-and-socket joint that enables you to raise, twist, bend, and move your arms forward, to the sides and behind you. The head of the upper arm bone (humerus) is the ball and a circular depression (glenoid) in the shoulder bone (scapula) is the socket. A soft-tissue rim (labrum) surrounds and deepens the socket. The head of the upper arm bone is coated with a smooth, durable covering (articular cartilage) and the joint has a thin, inner lining (synovium) for smooth movement. The surrounding muscles and tendons provide stability and support.

Many people know someone with an artificial knee or hip joint. Less common, but just as successful in relieving joint pain, is a shoulder replacement (arthroplasty). This procedure may be recommended if arthritis or degenerative joint disease makes your shoulder stiff and painful or if the upper arm bone is fractured so badly that tissue death may result.

Shoulder replacement surgery replaces damaged joint surfaces with artificial parts (prostheses). Usually, there are two components: The humeral component replaces the head of the upper arm bone. It is made of metal (usually cobalt/chromium-based alloys) and has a rounded ball attached to a stem that fits into the bone. This component comes in various sizes and can be a single piece or a modular unit.

The glenoid component replaces the socket (the glenoid depression). It is made of ultrahigh density polyethylene. Some versions have a metal tray, **but** totally plastic versions are more common.

Depending on the damage to your shoulder, Dr. Sanders may replace just the humeral head (a hemiarthroplasty) or both the humeral head and the glenoid (total shoulder replacement). The components come in various sizes and shapes and are held in place with either acrylic bone cement (cemented) or bone ingrowth (cementless). As in the natural joint, the surrounding muscles and tendons provide stability for the prosthesis.

