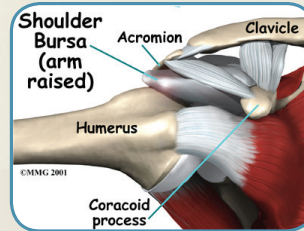




WHAT IS A REVERSE TOTAL SHOULDER?

By Jason P. Dieterle, D.O., M.S.

In basic form, the shoulder is a ball and socket joint. The ball is the top of the arm bone or humerus, and the socket is the wing bone or scapula. While the shoulder isn't a weight-bearing joint like a hip or knee, it too can wear out. When this occurs, a shoulder arthroplasty or total shoulder replacement may be the solution.



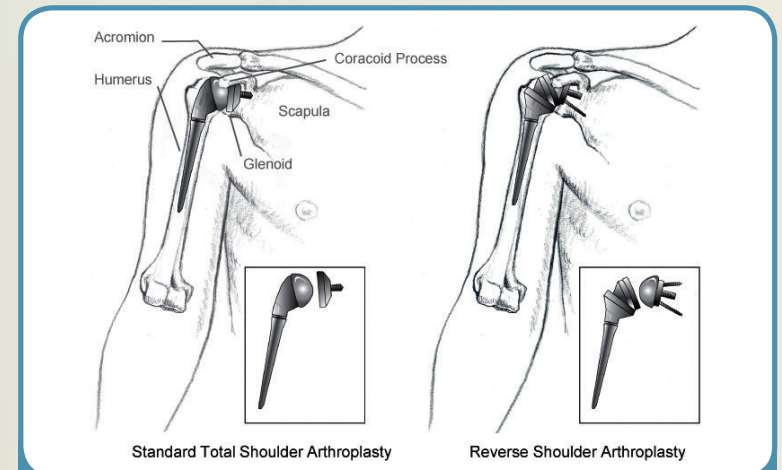
A standard total shoulder replaces the ball of the joint with a metal ball and the socket with a plastic socket. This solution is used when the joint is worn out but the muscles that control the shoulder still work well. Your doctor will examine your shoulder and test certain muscle groups in order to see if a standard shoulder replacement will work for you. Your doctor may order an MRI to confirm if certain muscles and tendons are intact and to confirm that your rotator cuff is in sufficient shape to support the ball and socket.

Your rotator cuff is a series of muscles and tendons around the shoulder joint that help to stabilize the joint. These muscles provide some strength with certain movements, but mainly support the shoulder joint to help the ball stay in the socket. When the rotator cuff is torn or damaged so that it is not functioning properly, the joint function is compromised and the joint becomes prone to what is called rotator cuff arthropathy.

Rotator cuff arthropathy is basically an arthritic shoulder that lacks a working rotator cuff. This specific type of arthritis occurs over time when the joint is not supported by the rotator cuff muscles. These changes in the shoulder joint can usually be seen on a standard x-ray.

The ball of the arm bone is moved up from its normal position against the socket and rubs against the acromion. The acromion is another part of the wing bone that is the square bone on the top part of your shoulder, located at the end of the collar bone.

Just like your natural shoulder does not function well without a rotator cuff, a standard total shoulder does not either. This can be compared to placing a ball on a shallow saucer. Without the rotator cuff to hold it in place, the metal ball simply slides around on the saucer. Studies have shown that if a standard total shoulder is used in a shoulder lacking a working rota-



A standard total shoulder replaces the ball of the joint with a metal ball and the socket with a plastic socket. A reverse shoulder replaces the socket with a metal ball and the ball of the joint with a plastic socket.

