**Surgical Technique**

**Step 1**

Begin by performing a resection of the humeral head and humeral canal preparation, as noted in the standard Global Advantage Surgical Technique (Cat. No. 0601-69-050). The surgical technique is available through your local DePuy sales representative. Once the appropriate size humeral broach/trial is inserted into the humerus, perform appropriate sizing of the humeral head using standard trial heads.

It is imperative that the humeral stem not be placed in a varus orientation. This will cause the head to sit too far medially and may result in excessive resection of the greater tuberosity and medial offset of the CTA head relative to the tuberosity. If it appears that the trial stem is in varus, convert to a cemented stem to allow proper seating of the prosthesis.

Upon determining that the rotator cuff tear is irreparable, debride the frayed edges of the remaining cuff and bursa. Do not perform an acromioplasty or release the coracacromial ligament, since this may compromise postoperative prosthesis stability.

**Step 2**

With the humeral broach/trial in place and the humerus dislocated, secure the CTA head resection clamp onto the humeral broach/trial and attach the left or right cutting guide (Figures 1A, 1B & 2C).
**Step 3**

Using an oscillating saw or osteotome, remove bone from the greater tuberosity. Use caution not to contact the broach with the saw blade or osteotome (Figure 2).

**Step 4**

Once the jig has been removed, the transverse cut that was started with the cutting guide needs to be extended medially to the original oblique cut. It is important that no extra bone be left where these two cuts intersect as this will prevent the head from fully seating into the humeral stem (Figure 3A). Also, remove with a rasp or rongeur prominent bone lateral to the CTA head (Figure 3B).

Place an appropriate-sized CTA trial head onto the humeral broach/trial. Reduce, then assess the shoulder and soft tissue balancing as described in the Global Advantage Surgical Technique.
Step 5

Remove the trial humeral head and broach. Pass sutures for the repair of the subscapularis tendon through the metaphyseal bone just distal to the humeral neck cut (Figure 4).

Impact the final head onto the final body using the delrin-tipped impactor and a one or two-pound mallet. Strike the head three to four times to ensure proper seating. Next, insert the final component assembly into the humerus to the proper seating position.

Step 6

Reduce the shoulder, then repair the subscapularis tendon back to the humerus using the previously placed sutures. In patients with sufficient bone stock, the sutures previously placed in the subscapularis tendon can be placed through drill holes in the lesser tuberosity to reattach the tendon (Figure 5).