OTA Tip of the Month for June 2011 – Author: Richard Kyle MD, 7th President of the OTA

Arthroplasty for Failed Fixation of a Femoral Neck Fracture

Fixation of displaced femoral neck fractures of the elderly consistently has a high revision rate, ranging from 20% to 40%. Most of these revisions require an arthroplasty. It is many times stated that arthroplasty with failed femoral neck fracture fixation is relatively easy because you can treat these almost as a primary arthroplasty. In my experience this is untrue. Many times the failed femoral neck arthroplasty is 3 months to a year after the original surgery. This results in marked shortening of the femoral neck and thickening of the capsule. Because of the shortening and the thickened capsule it is very difficult to dislocate the hip to perform the arthroplasty. The surgeon should anticipate when entering the hip that there will be very little or no femoral neck and the greater trochanter will be very close to the ilium. Dislocation and mobilization to perform an arthroplasty requires complete capsulectomy and some skeletonization of the proximal femur to free up the femoral shaft fragment to perform the arthroplasty. Care must be taken not to fracture the shaft during manipulation since stress risers are created from the previous screw placement. The bottom line is that arthroplasty in a failed femoral neck fracture is not easy! It requires expertise and care to avoid fracturing osteoporotic bone. It requires excision of hip capsule and scar tissue, with skeletonization of part of the proximal femur to mobilize the hip. These issues must be addressed in order to perform a successful arthroplasty after failed femoral neck fracture fixation.
