Identify the anatomic landmark and location of the surgical skin incision for an approach to the hip joint.

Select one:

- a. A straight incision caudal to the greater trochanter, extending the length of the femur from the hip joint to the lateral femoral condyle
- b. A curved incision cranial to the greater trochanter, extending the length of the femur from the hip joint to the lateral femoral condyle.
- c. An incision dorsal to the greater trochanter, curving from the iliac crest distally over the trochanter and ending at the mid-diaphysis of the femur.
- d. A curvilinear incision starting slightly caudal and dorsal to the trochanter, extending distally passing cranial to the trochanter extending over the proximal 1/3 of the femur.
 Feedback

Proper orientation of the skin incision is important to allow exposure of subsequent tissue layers and adequate exposure of the hip joint for femoral **broaching** and acetabular exposure. The incision is centered over the greater trochanter. The incision should begin dorsally and slightly caudally, midway between the greater trochanter and the spine. It courses distally, cranial to the greater trochanter and extends over the proximal 1/3 of the femur.



The caudodorsal start point of the incision is key to reducing the interference by the soft tissues in this region during femoral canal reaming and broaching.

The correct answer is: A curvilinear incision starting slightly caudal and dorsal to the trochanter, extending distally passing cranial to the trochanter extending over the proximal 1/3 of the femur.

Question **2** Correct Marked out of 1 Flag question **Question text**

Following the skin incision and subcutaneous tissue layer dissection, the biceps femoris muscle is dissected free of the biceps fascia and is retracted cranially.

Select one: True False

Feedback

The fascia of the biceps femoris muscle is incised along the length of the skin incision. The biceps muscle is retracted caudally to expose the superficial gluteal muscle dorsally, the tensor fascia lata muscle and the, the fascia lata.







Incise between Biceps Femoris Muscle and Biceps Fascia

Superficial Gluteal Muscle, Tensor Fascia Lata Muscle & Fascia Lata

Incising Fascia Lata & separating the Tensor Fascia Muscle from Superficial Gluteal Muscle

The correct answer is 'False'.

Question **3** Correct Marked out of 1 Flag question Question text

Tenotomies of both the middle gluteal and deep gluteal muscles are required for access to the hip joint. Select one: True False Feedback

A tenotomy of the middle gluteal muscle tendon is not performed. This muscle belly is elevated and retracted dorsally with an army navy retractor. A partial tenotomy of the deep gluteal muscle is done to expose the underlying joint capsule and common origin of the vastus lateralis and vastus intermedius muscles.







Exposed Vastus Lateralis Muscle and Middle Gluteal Muscle

Retracted Middle Gluteal Muscle exposing the Deep Gluteal Muscle & Tendon

Transected Deep Gluteal Tendon

The correct answer is 'False'.

Question **4** Correct Marked out of 1 Flag question Question text

The appropriate capsular incision is oriented in which direction? Select one:

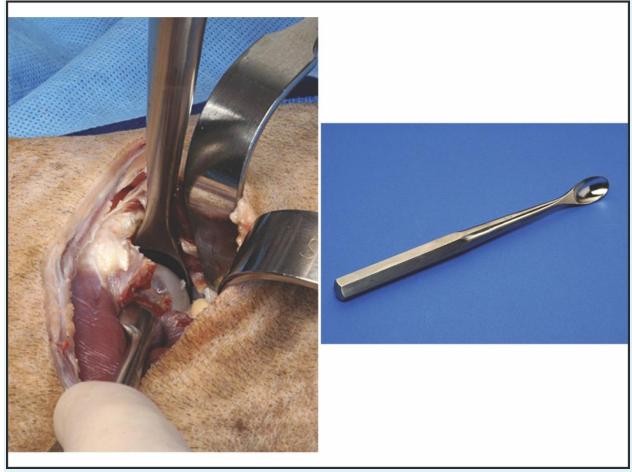
- a. The capsular incision originates from the labrum of the acetabulum, runs parallel to the axis of the femoral neck and ends at the femoral metaphysis over the insertion of the vastus muscles.
- b. A "T" shaped incision is made in the capsule over the femoral head and neck
- c. The capsular incision originates from the cranioventral edge of the acetabulum and is directed towards the greater trochanter
- d. A linear capsular incision is made at the base of the femoral neck allowing the capsule to be reflected cranial and dorsal
 Feedback

The joint capsule incision extends from the labrum of the acetabulum (1-2 o-clock position for a right hip and 10-11 o'clock position for a left hip) along the length of the femoral neck and ends on the proximal femur just below the insertion of the deep gluteal tendon, over the origin of the vastus lateralis and intermedius muscles.

The correct answer is: The capsular incision originates from the labrum of the acetabulum, runs parallel to the axis of the femoral neck and ends at the femoral metaphysis over the insertion of the vastus muscles.

Question **5** Correct Marked out of 1 Flag question **Question text**

Name this instrument and its purpose.



Select one:

- a. Hip curette. Used for removing subchondral bone
- b. Hatt Spoon. Used to disrupt the ligament of the head of the femur and disarticulate the hip joint
- c. Bone curette. Used to remove osteophytes from the acetabulum
- d. Hatt curette. Used to disrupt soft tissue and dislocate the hip joint

Feedback

This instrument is called a Hatt Spoon. The spoon end is used to maneuver around the medial aspect of the femoral head such that It's sharp outer edge can be used to disrupt the ligament of the head of the femur allowing hip disarticulation.

The correct answer is: Hatt Spoon. Used to disrupt the ligament of the head of the femur and disarticulate the hip joint

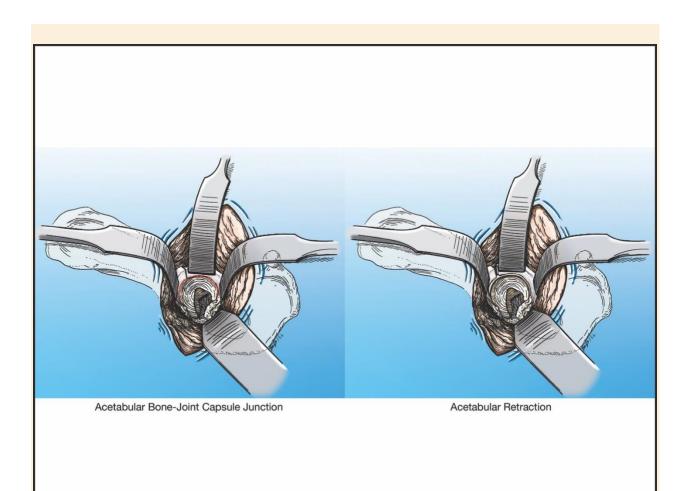
Question **6** Correct Marked out of 1 Flag question **Question text**

What instrument facilitates the best tissue retraction and visualization of the acetabulum? Select one:

- a. Gelpi retractors
- b. Army Navy retractors
- c. Meyerding retractors
- d. Senn retractors

Feedback

Meyerding retractors positioned around the acetabular rim, cranially, dorsally, and caudally provide excellent exposure of the acetabulum.



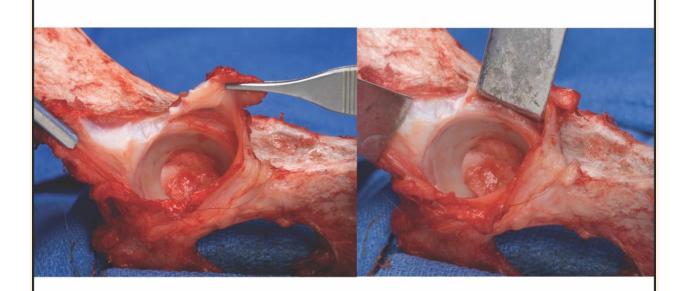
The correct answer is: Meyerding retractors

Question **7** Correct Marked out of 1 Flag question Question text

A partial surgical release of the joint capsule along the acetabular rim can provide a good anchor point for capsular retraction.

Select one: True False Feedback

Creating a partial release of the attachment of the joint capsule from cranioventral to caudoventral around the rim of the acetabulum with a #11 scalpel blade provides a good anchoring point for the teeth of the Meyerding retractor.



The correct answer is 'True'.

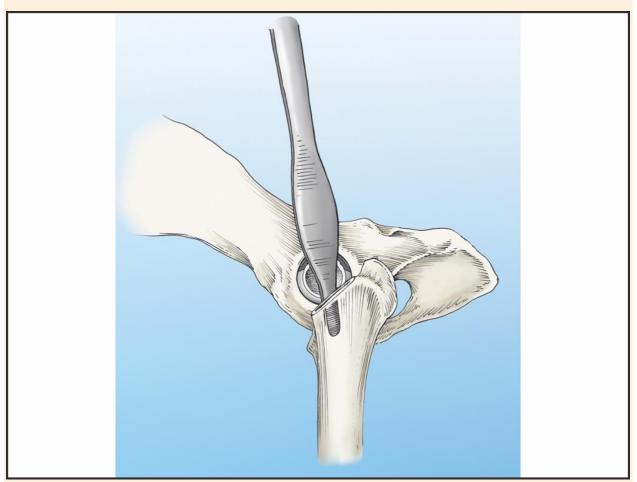
Question **8** Correct Marked out of 1 Flag question **Question text**

What is the correct orientation of the femur and name the instrument used to elevate the proximal femur for broaching?

- Select one:
- a. Neutral walking position. Large Senn retractor
- b. 90 degrees of external rotation. Meyerding retractor
- c. 130 degrees of external rotation. Hohman retractor
- d. 90 degrees of external rotation. Hohman retractor Feedback

The femur is positioned in 90 degrees of external rotation such that the cranial aspect of the femur and patella are pointing dorsally. A large, blunt tipped, Hohman retractor is positioned medially along the caudal proximal femur to elevate the proximal femur from within the surgical

field.



The correct answer is: 90 degrees of external rotation. Hohman retractor

Question **9** Correct Marked out of 1 Flag question **Question text**

Sciatic nerve injury may result from excessive pressure on the nerve as a result of caudal femoral retraction during the THR procedure.

Select one: True False Feedback

For adequate exposure of the acetabulum the femur is retracted caudally. Holding the femur in this retracted position may place increased pressure on the sciatic nerve resulting in a postoperative sciatic nerve palsy. Release of the femur intermittently when possible throughout the acetabular preparation procedure is recommended to avoid this complication.

The correct answer is 'True'. Question **10** Correct Marked out of 1 Flag question **Question text**

Why is it important to be able to elevate the proximal femur from the surgical site? Select one:

- a. To ensure restoration of hip range of motion once implants have been placed
- b. To create optimal access to the femoral canal for broaching
- c. To decrease the risk for sciatic nerve injury
- d. To aid making a more accurate osteotomy of the femoral neck Feedback

Access to the proximal femoral canal at the level of the neck resection must be unimpeded if reaming and broaching are to occur along the central axis of the femur. Positioning the limb to elevate the proximal femur away from the soft tissue of the hip region and lowering the distal aspect of the femur and stifle joint will help achieve this goal.

The correct answer is: To create optimal access to the femoral canal for broaching