

1

**PROBE PLACEMENT**

Transducer: Linear/Curved

Depth: 5-6 cm

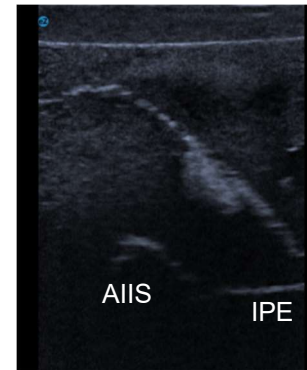
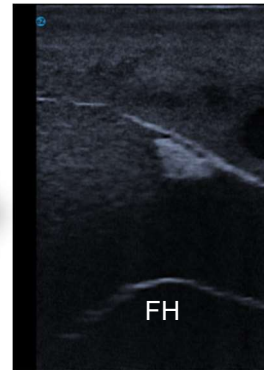
**Increase gain and turn off tissue harmonics for better image.**

Position the transducer, with gel, at the level of the head of the femur. Then slide the probe cephalad until the floor of the pelvis and the Anterior Inferior Iliac Spine (AISIS) is observed.

2

**ANATOMY**

- Anterior Inferior Iliac Spine (AIIIS)
- Femur Head (FH)
- Iliopectineal Eminence (IPE)



The head of the femur is distinctively curved. Moving the probe cephalad will cause it to slowly disappear. Continued cephalad movement will bring the IPE and the AIIIS into view.

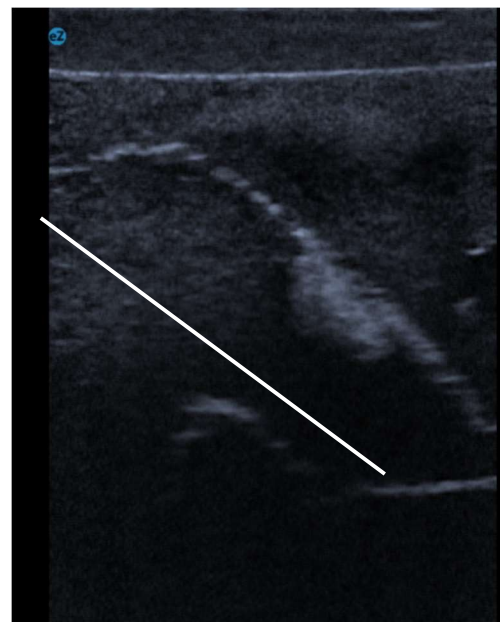
3

**NEEDLE INSERTION****Use sharp bevel 25-22g, 5-10 cm length needle.**

- Insert the needle in-plane from lateral to medial



Advance the needle slowly. Slight probe adjustments may be necessary to keep the beam on top of the needle.



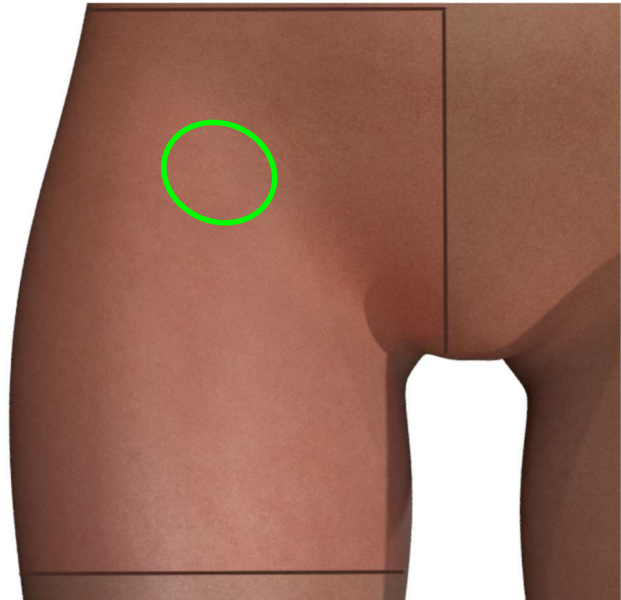
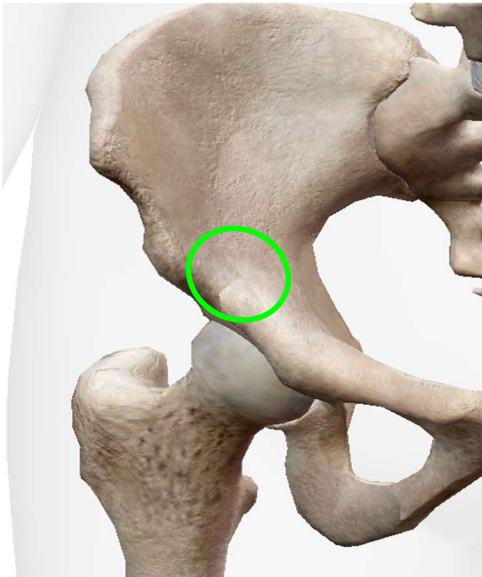
**Do not use the needle to find the beam, Use the beam to find the needle.**

Place the tip of the needle in the trough just medial to the AIIIS. Avoid the femoral nerve when advancing the needle.

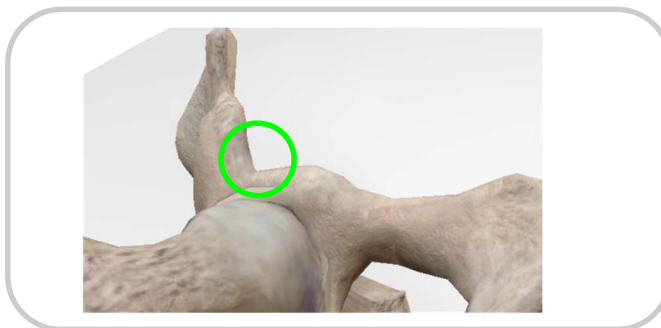
## ANATOMICAL DETAIL

The anterior hip capsule has been shown to be supplied by articular branches of the femoral, obturator and accessory obturator nerves, where present. The posterior capsule is innervated most commonly by the nerve to the quadratus femoris, while small articular branches from the sciatic nerve and superior gluteal nerves may also be seen. The anterior capsule, which contains the majority of the sensory innervation of the joint and has been identified as the main source of the majority of postoperative hip pain, is the target for the PENG block. The PENG block is an fascial plane block, targeting the plane between the psoas tendon anteriorly and the pubic ramus posteriorly.

Lateral



Lateral



## CARE AND MAINTENANCE

Clean the simulator with an alcohol swab or wash with mild soap and warm water before first use and prior to storage.

Allow to dry naturally or dab dry with a lint-free cloth.

Store at room temperature.

Never place objects on top of the simulator while in storage.

Never place printed material on the simulator as permanent ink transfer may occur.

Always use the smallest gauge needle possible as this will help with simulator life and recovery.

Never use a Tuohy needle.

An increase in gain is typically required for the best image.