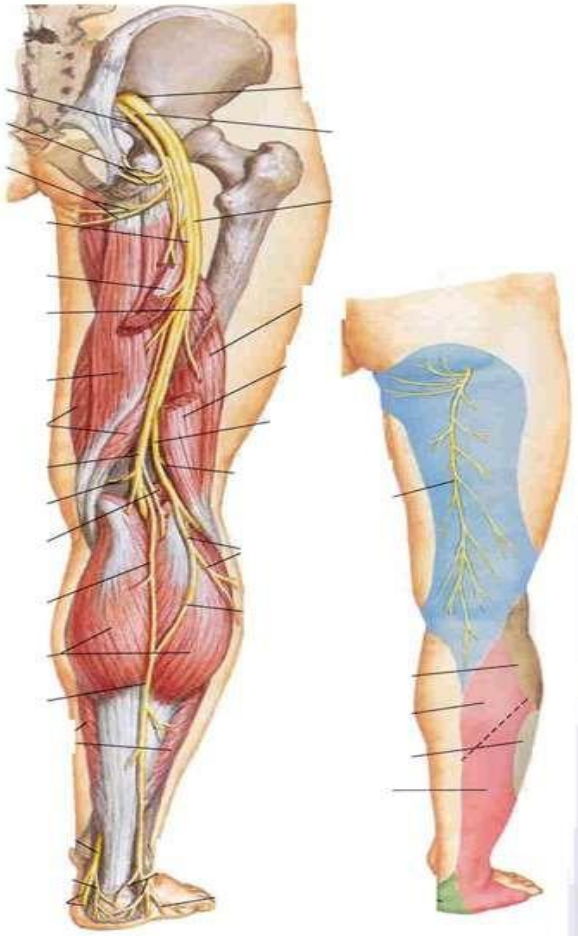


SCIATIC NERVE BLOCK

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DEPARTMENT OF ANAESTHESIA

Sciatic Nerve



- It then runs vertically down wards in the hamstring compartment of the thigh to reach the popliteal fossa where it divides in to **common peroneal and tibial branches**.
- Occasionally this division occurs much higher in the thigh.
- The **tibial nerve** passes vertically down wards through the calf to supply the **heel and sole of the foot**.
- The **common peroneal nerve** winds diagonally across the popliteal fossa to the lateral part of the calf before descending to the foot where its branches innervate the dorsal structures.

Indications of sciatic nerve block

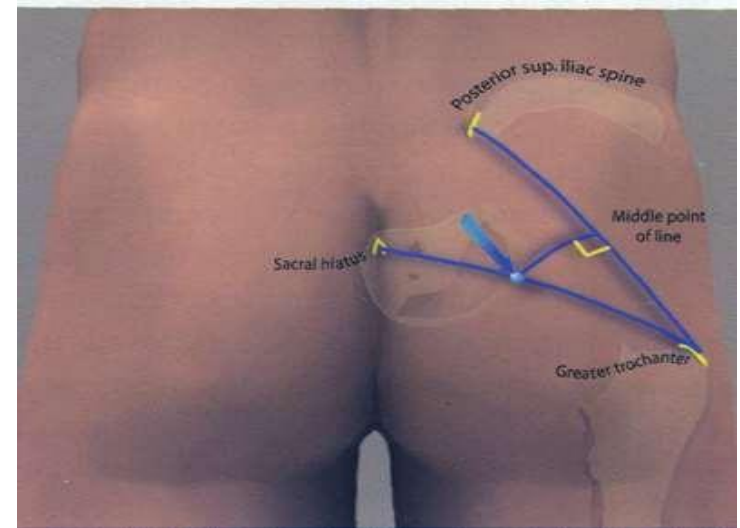
- Produce anesthesia in the back of the thigh.
 - Ankle and foot with saphenous nerve block.
 - Surgery of the knee with the block of femoral.
- Surgery of the leg with saphenous block

Lateral/Posterior Approaches

- The patient in the Sims position. Lie with the side to be blocked upper most.
- The **posterior superior iliac spine** and the **greater trochanter** are identified and a line is drawn between the two points. A perpendicular line is dropped at its mid point
- The point of entry is 1 to 1½ inches from the midpoint along this line.
- This point should meet the line drawn from the sacral hiatus to the greater trochanter.

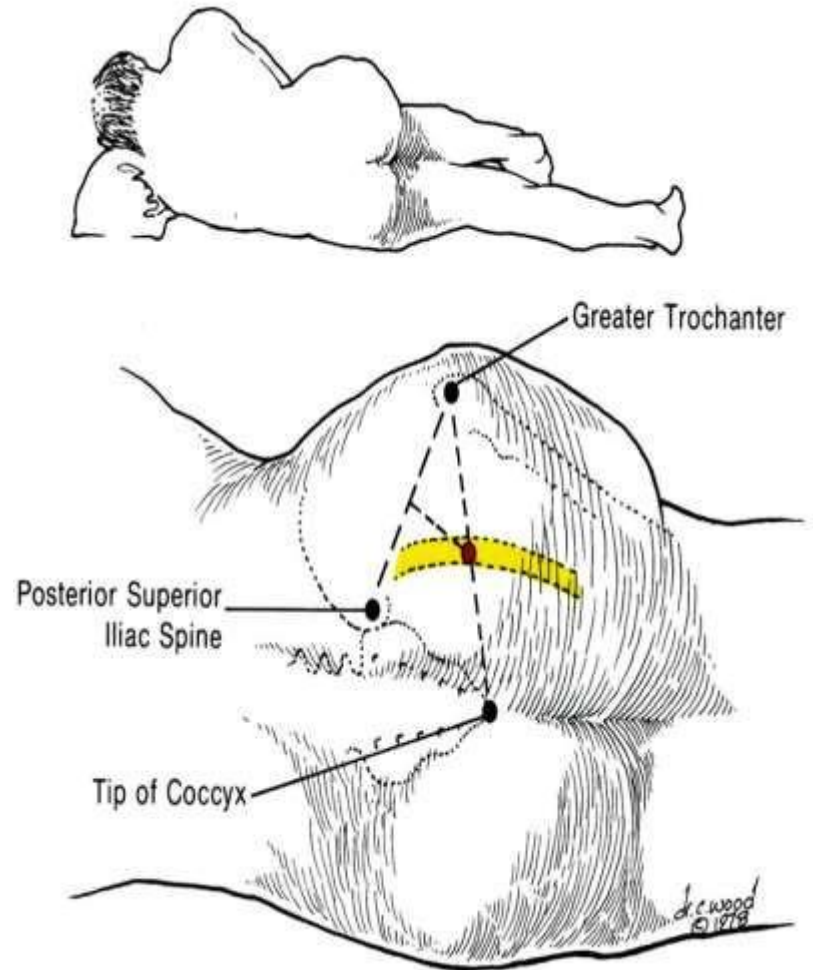


POSTERIOR APPROACH



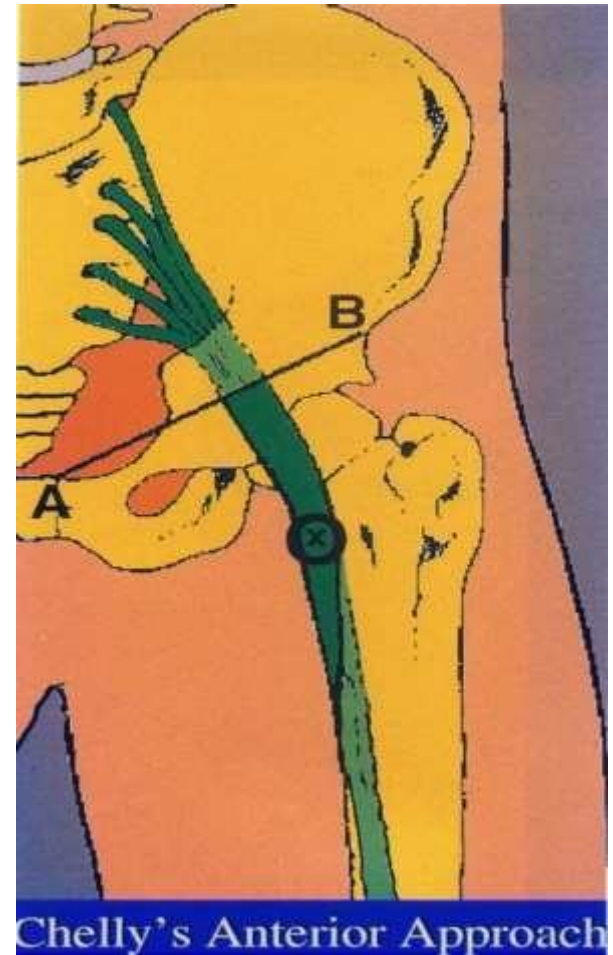
Lateral/Posterior Approaches...

- Skin cleansing and local anesthetic is infiltrated in the skin and muscle.
- A 22-gauge, 10–12-cm needle is advanced until a paresthesia or nerve stimulator response is elicited or bone is contacted.
- If bone is encountered, the needle is redirected systematically in a lateral or medial direction.
- A 9 spinal needle can be used (6-8 cm. deep)
- Dosage = 20-30 ml. 1% lignocaine or prilocaine or 0.5% bupivacaine.
- vedio

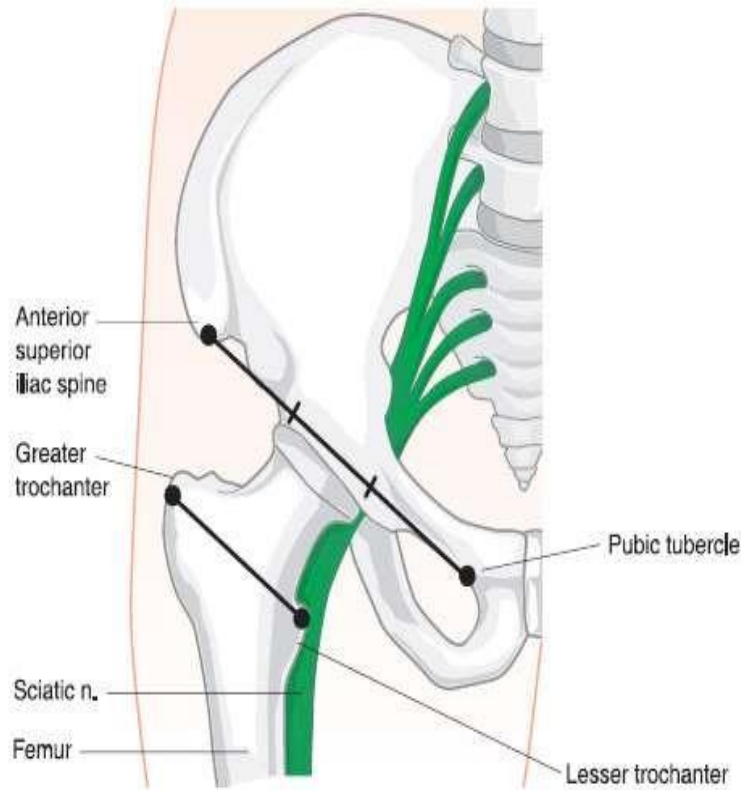


Anterior Approaches of sciatic nerve

- Supine position
- Identify inguinal ligament line.
- This line is divided in to three equal parts and a perpendicular dropped from the junction of the medial and middle thirds.
- The anterior approach requires a fairly long needle



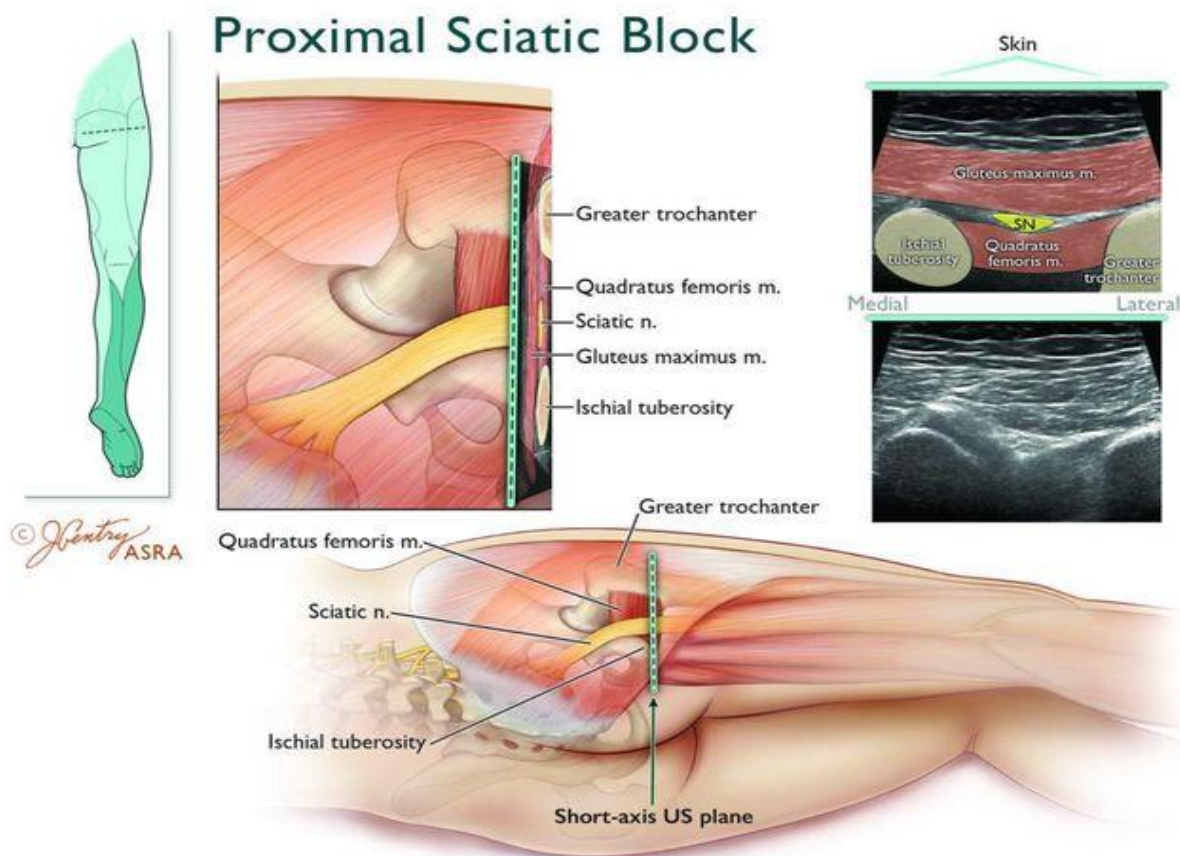
Anterior approach

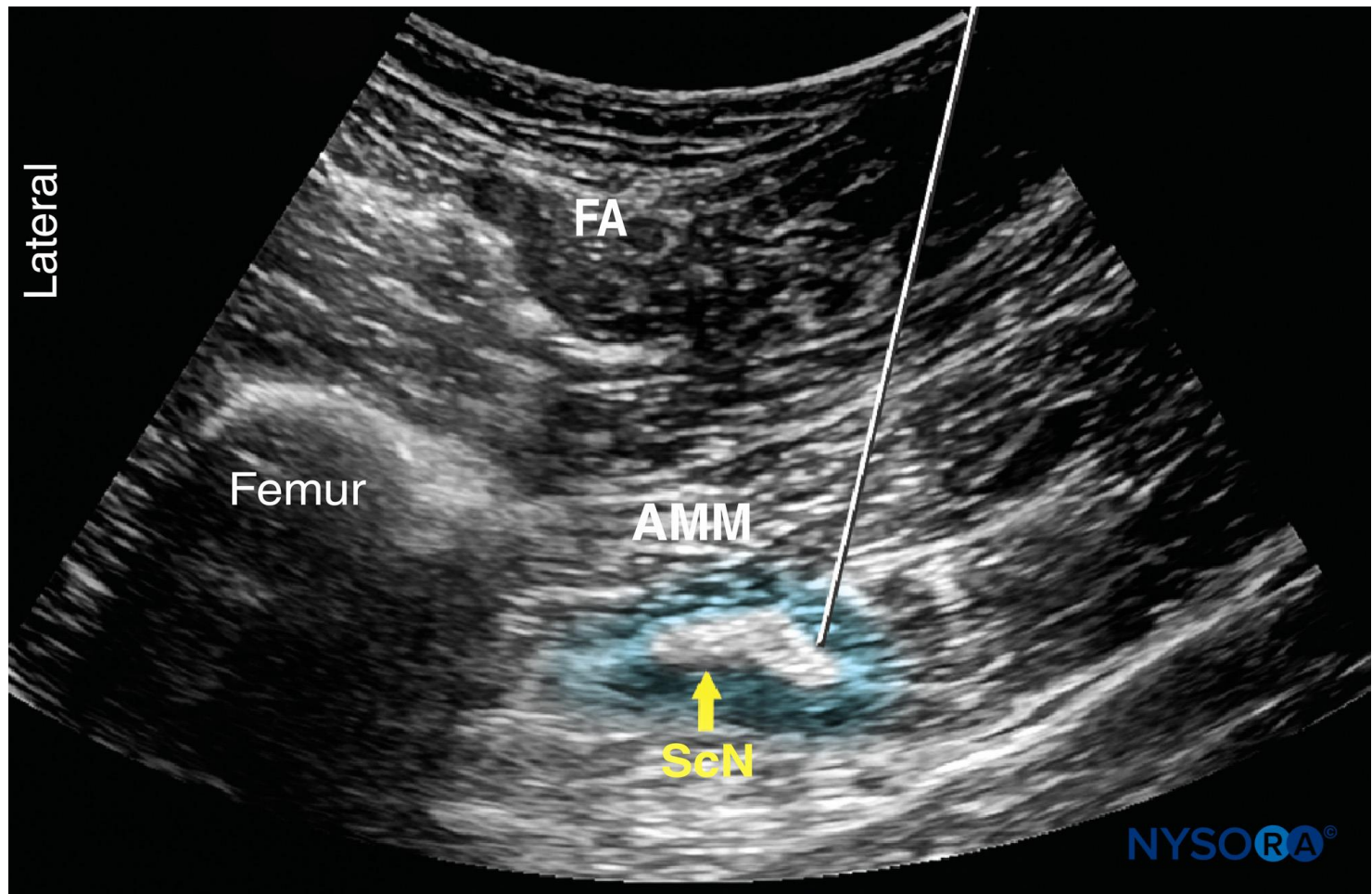


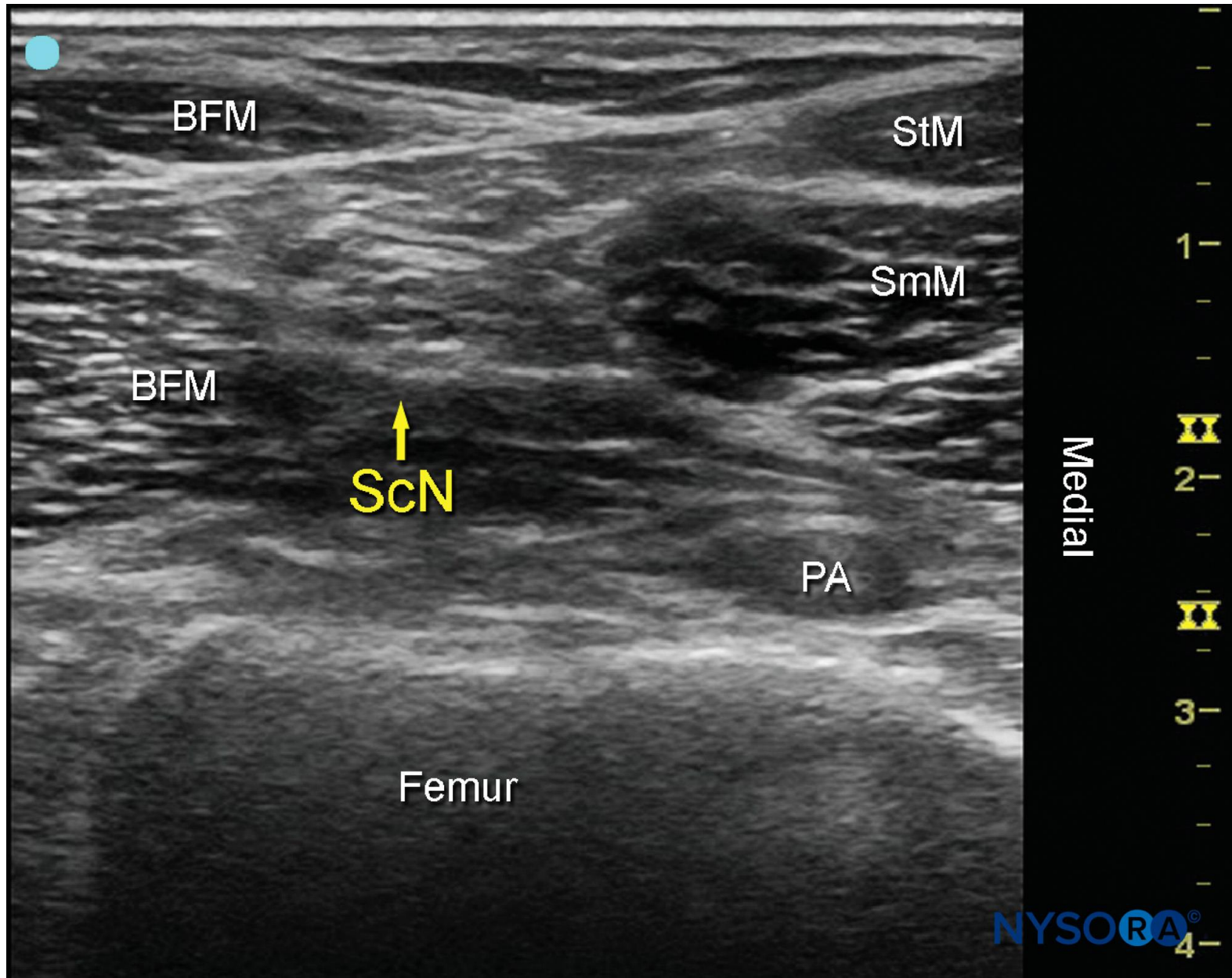
- A line is drawn then from the top of the **greater trochanter** parallel to the line of the inguinal ligament and the point where it meets the **perpendicular** is the point of needle insertion.
- This over lies the lesser trochanter on the inner aspect of the femur and at this level the sciatic nerve lies close behind the acetabulum and the lead of the femur.

USG ANATOMY

Anatomy of the ultrasound-guided proximal sciatic nerve (SN) block.







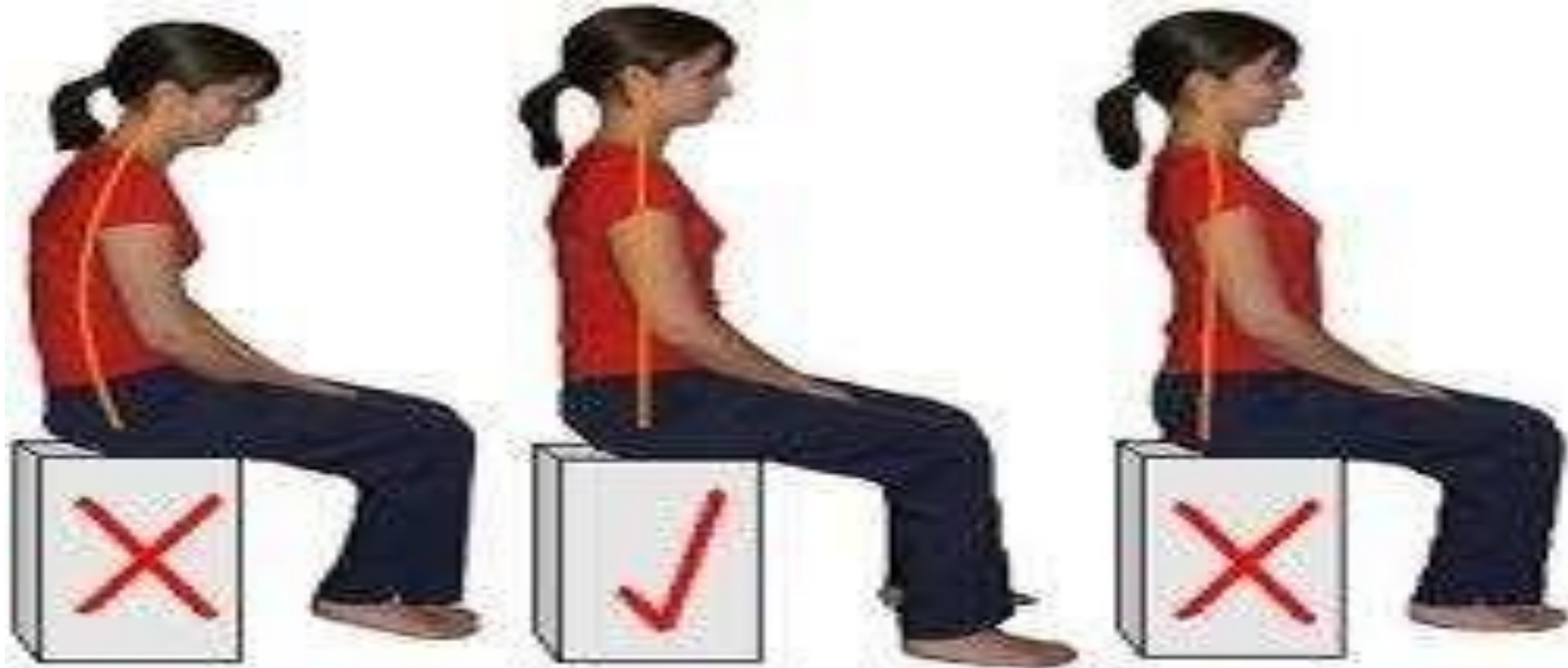
Side Effects/Complications

- Technically difficult to perform and can be quite painful.
- Hematoma formation is possible
- The risk of nerve damage is also reported
- Self limited persistent paresthesia
- A minimal degree of vasodilatation

Sciatica

- Is a term used to describe the symptoms of low back pain that spreads (radiates) through the hip, to the back of the thigh, and down the inside of back the leg via the sciatic nerve, characterized by pain, tingling, numbness, or weakness.
- Sciatica (sometimes known as radiculopathy) is a description of symptoms of inflammation or compression of the sciatic nerve , not a diagnosis.
- A herniated disc, spinal stenosis, degenerative disc disease, and spondylolisthesis, can all cause sciatica.





Symptoms of Sciatica

- ❑ Cramping sensation in the thigh
- ❑ Radiating pain from the buttock down the back of the leg
- ❑ Tingling in the legs
- ❑ Numbness in the legs
- ❑ Burning sensation in legs or thigh area
- ❑ Severe cases present with muscle weakness
- ❑ Literally a pain in the butt!

Symptoms of Sciatica...

- In Severe cases lower extremity weakness, numbness in the upper thighs, and/or loss of bladder or bowel control.
- Loss of knee flexion due to weakness of hamstring group of muscles.



Sciatica - More Than a Pain in the Butt





• **THANK YOU**