LOMA LINDA UNIVERSITY
DEPARTMENT OF
ANESTHESIOLOGY

MANUAL OF REGIONAL ANESTHESIOLOGY

2020-2021
Second Edition

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ANESTHESIOLOGY AND PAIN MEDICINE

Welcome to your rotation of acute pain, perioperative pain and regional anesthesiology!

By the end of this rotation you will establish competency in peripheral nerve blocks across different parts of the body in addition to receiving training in adult and pediatric neuraxial interventions.

> ***"Most important element of success in this subspecialty is always being prepared"***

This manual will describe everything you need to know to ensure basic knowledge during your rotation as well as didactic points you will need to conceptualize to perform your blocks safely and with high efficacy.

A- <u>The day before your rotation:</u>

Please contact Dr. Baher Boctor @ 818-515-4042 for a brief orientation and to also gain access to acute pain management shared patients list.
The acute pain pager will be held every day on the rotation from 6:00 am till 4:00 pm and then handed to the OB resident on call for night time.

B- <u>The night before every day on acute pain:</u>

Take a look at all the surgical cases at MC, OSC, SH with your attending.
In a nutshell:

- ❑ -All of the open general surgery (adults or peds ex laps/colorectal cases/whipple/pancreas rib fracture cases at medical center/HSH will be candidates for thoracic epidurals- levels of placement T7-T12).
  - Robotic and laparoscopic cases for colorectal surgery/hepatectomies/ GYN/onc/general surgery at MC, HSH will be candidates for intrathecal opioid injections after confirming with the surgical team.
- ❑ (Morphine 150-250 mcg and fentanyl 20-30 mcg obtained from the pdcu pyxis machine.
  - Please check on anticoagulant medications that were given to patient before you consent for any neuraxial procedure.
  - Serratus chest wall blocks for VATS. Thoracic Epidurals for thoracotomy cases.
  - TAP blocks for minimally invasive abdominal surgeries such as inguinal/ventral hernias as well as some GYN ONC surgeons preference (Drs. Hong, Ioffe and Shwartz)
  - Upper extremity blocks for orthopedics, plastics and vascular surgery fistula cases after checking with the surgeons (Dr Patel welcomes).
  - Lower extremity blocks for orthopedic rooms/trauma amputations/vascular: Drs. Rajfer, Roiz, and Morrison and Hayton, Murga.

C-The morning of every day on acute pain:

Most residents arrive to medical center at 6:00 am for obtaining consent while patient is in observation (pre-pdcu) unit and to expedite flow to PDCU. (Wednesday morning 7:15)

Thoracic epidural placement will need to start around 6:15 am at the latest.

List of items that are needed prior to starting:

1- Chloroprep (Surgical one-large size).

2- Masks

3- Sterile Gloves

4- Epidural/spinal kit/peripheral nerve needle.

5- Tegaderm

6- Medapor tape and ultrasound (if it's a nerve block).

Please have duplicates of all of the above items just in case an item is malfunctioning.

- **As soon as patient arrives to pdcu and gets their IV placed, please timeout with nursing team and get patient positioned for procedure.**
- **Please ask the surgical team to add the consult request for acute pain consultation.**

D- E-consent patients on Epic:

a. **Pain Procedures → eConsent-Encounter → Surgical/Procedure/Treatment Consent**
b. **Procedure is "Thoracic or lumbar epidural catheter placement" or "Intrathecal single shot injection," or " peripheral nerve blocks**
c. **The dot phrase for epidurals adverse outcome risks is: .epidural complications. For peripheral nerve blocks: it is .peripheralsideeffects**
d. **"Failure to relieve pain, low blood pressure, back pain, breakage of needles or catheters possibly requiring surgery, infection or bleeding possibly requiring surgery, spinal headache which may require medical therapy or a blood patch, persistent area of numbness and/or weakness of the upper or lower extremities, rapid absorption of local anesthetics causing dizziness and seizures, temporary total spinal anesthesia requiring life support systems, respiratory and/or cardiac arrest requiring life support systems"**

Create the following dot phrases for consents

- ❑ **"Thoracic or lumbar epidural catheter placement"**
- ❑ **"Caudal Epidural Injection With or Without Catheter Placement"**
- ❑ **"Lower extremity peripheral nerve block with or without catheter placement"**
- ❑ **"Upper extremity peripheral nerve block with or without catheter placement"**
- ❑ **" Chest wall blocks"**
- ❑ **" Abdominal wall blocks"**
- ❑ **Complications of epidurals: ". Epiduralsideeffects."**
- ❑ **Complications of peripheral blocks: ".peripheralsideeffects."**

E- <u>Documentations:</u>

• Two different notes are needed to document post-op pain blocks:

1. Procedure Note (see below to complete)

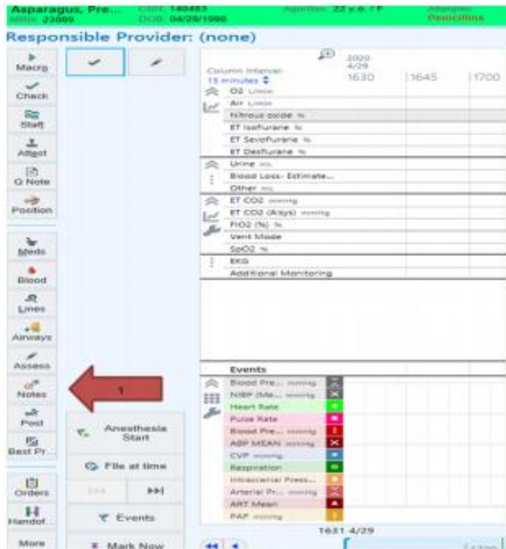
2. Consult Note (see below to complete)

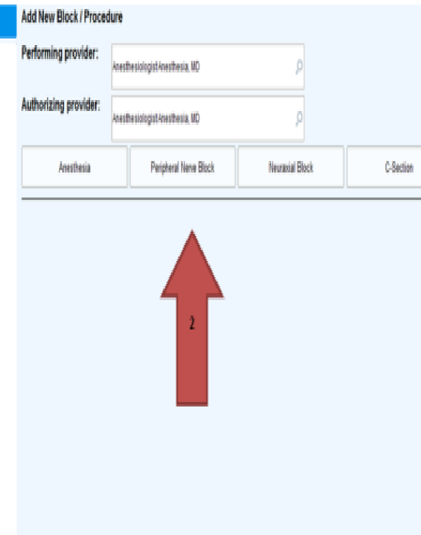
• Those patients that receive intrathecal narcotics will require an additional order set titled "opioid spinal order set."

• A Procedure Note is documented within the anesthesia "Notes" section and allows the anesthesia team to document details regarding the procedure. Note: some medications will go directly into the MAR from this section and some do not, so please confirm that medications are documented appropriately into the anesthesia record medication section.

To complete a "Procedure Note", find under Intra-op icon.

• Step 1: Select "Notes". • Select Peripheral Nerve block and complete appropriate information for selected block.





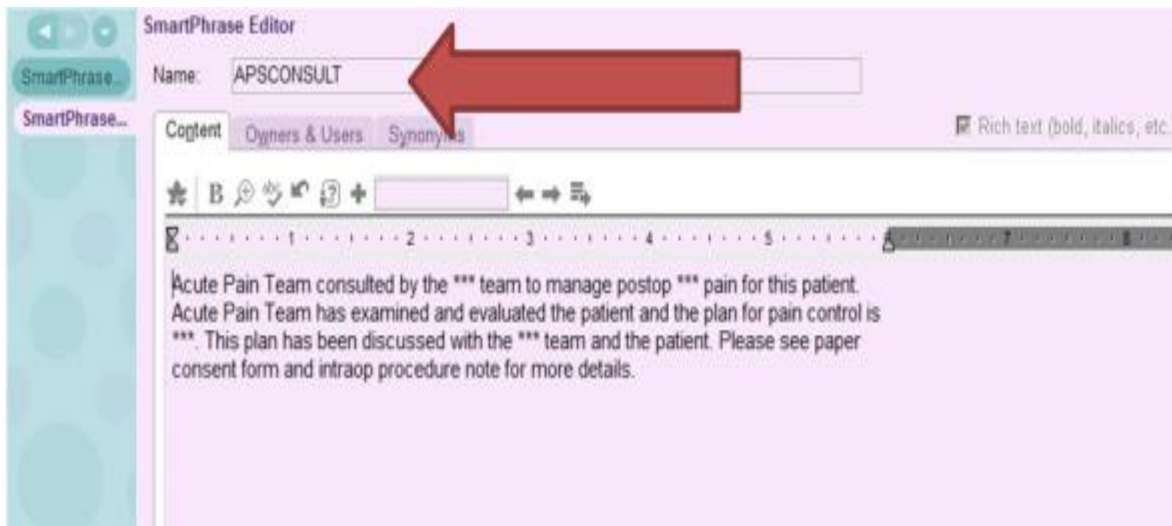
- Complete the Consult Note (this can only be completed after an Acute Pain Consult has been initiated by surgical team and supports that we did not self-refer for the block placement).
- Get the dot phrase for an acute pain consult note ("Acute Pain Team consulted by the *** team to manage postop *** pain for this patient. Acute Pain Team has examined and evaluated the patient and the plan for pain control is ***. This plan has been discussed with the consulting team and the patient. Please see the consent form and intraop procedure note for more details.")
- Make a dot phrase for your signature that includes your name, acute pain service, and the acute pain pager number (4878)

After the consult has been entered by the surgical team, you will enter a Consult Note.

Step 1: Click rounding (left hand tab)

Step 2: Click Consult Notes

Step 3: Select Acute Pain Management Consult and enter note. • This can be generated by a smart phrase • Once completed, ACCEPT • There are a couple different examples of which notes should be placed. • Generic Acute Pain Block consult note example



ORDERS PLACEMENT AND MOST FREQUENTLY UTILIZED MEDICATIONS

- **Add the following order sets to your Favorites:**
  - **Epidural Analgesia Orders (PCEA) - Adult**
  - **Patient controlled analgesia (PCA) Orders – Adult**
  - **Patient controlled regional analgesia orders**
  - **Peds epidural analgesia orders (patients less than 40kg) (PCEA)**
  - **Spinal opioids postoperative orders.**

1) **<u>Place orders for epidural:</u>**
   a. **Pre → orders at top of page → EPIDURAL ANALGESIA ORDERS (PCEA) – ADULT order set → leave checked boxes checked and order fentanyl 2 mcg/ml, bupivacaine 0.0625%, typical rate is 8 ml/hr with patient bolus dose of 3 ml and bolus interval of 15 min**
      i. **Phase of care is pacu to post-op, everything is “sign and hold” except for the medication bag itself which is “sign” only**
      ii. **Other meds you can order for patient (a lot of this depends on anesthesia attending, whether patient’s diet will be advanced, and patient’s comorbidities such as renal function and age)**
         1. **IV Tylenol 1000 mg q6h ATC**
         2. **IV robaxin 500 mg TID**

3. IV dilaudid 0.5 q2h prn for breakthrough pain

b. Other order sets you may use:
   i. PEDS EPIDURAL ANALGESIA ORDERS (Patients Less than 40 kg) (PCEA) – discuss with anesthesia attending the rate and bolus (often no bolus for young peds patients)
   ii. PATIENT CONTROLLED ANALGESIA (PCA) ORDERS – ADULT
      1. Usually we order dilaudid PCA for patients whose epidurals failed, discuss dose with anesthesia attending
   iii. Spinal Opioids Postoperative Orders
      1. Ordered for patients who received intrathecal single shot only, leave checked boxes checked, consider ordering IV Tylenol 1000 mg q6h ATC and something for breakthrough pain

2) Prepare medication bag for epidural pump:
   a. Bring patient sticker with CSN # to central supply (take elevator next to adult anesthesia workroom to A-level, x42215), pick up PCEA pump with pump tubing
   b. Pick up fentanyl/bupivacaine med bag
      i. For adults, go to PACU Pyxis or 2nd floor pharmacy (x42286)
      ii. For peds, go to peds PACU Pyxis or 5th floor pharmacy (x15583)
   c. Prime the pump and input settings for rate and bolus (code is 94629)
   d. Bring PCEA pump and ropivacaine 0.2% to resident in the case

3) Round on your old patients:
   a. Print out list for you and your attending: patient lists → shared patient lists → Acute Pain (Dr. Boctor needs to give you access to this list) → print
   b. Data to gather:
      i. Pain severity, PCEA use, prn med use: go to Summary → type "Pain" in the upper right box
      ii. Vitals (whether febrile if has epidural catheter in place)
      iii. Labs (whether leukocytosis if has epidural catheter in place, renal and hepatic function for the meds you order)

iv. Ask patient about pain, nausea/vomiting, flatulence, itching, chest pain, shortness of breath
v. Assess for bowel sounds
vi. Assess epidural catheter site

c. Usually attending is okay with you pre-rounding to gather data, then waiting to see the patient with the attending
d. Management of patients with epidurals usually entails deciding when to wean off the epidural, when to add PO meds
e. For peds <2 yo, need to round with the peds anesthesia attending

4) <u>Notes needed for rounding on the existing patients</u>

a. Notes → new note → type is "progress note" → type "APS" into SmartText field → select "APS progress note"
b. Once you have already written a progress note on someone, then the next day you can click on that note → click "copy" → update appropriately

5) <u>Update the Acute Pain list</u>

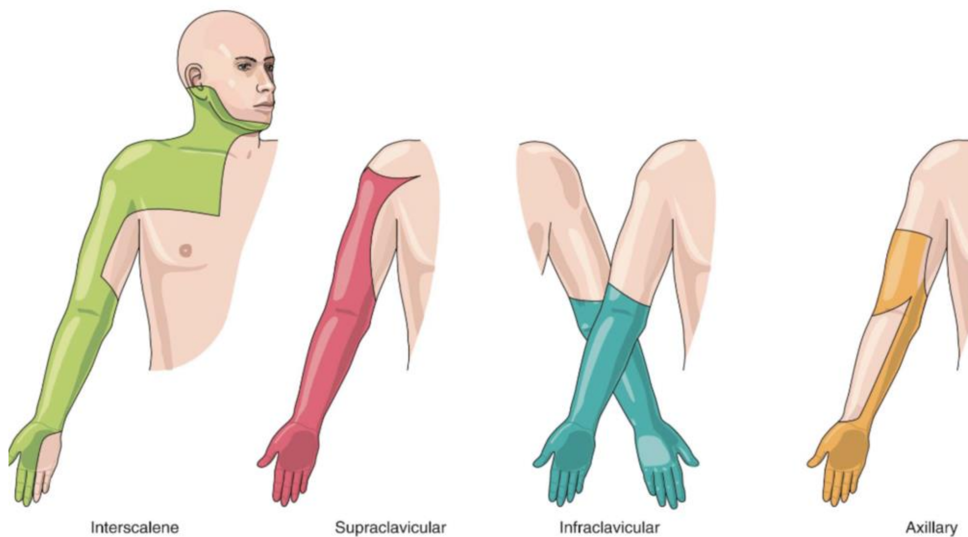
a. Remove patients who were single shot spinals, single shot peripherals (from any hospital), or patients your attending says you can "sign off" on: right click on patient name → treatment team → click "End" on Acute Pain Management
i. If that does not work, then open orders and discontinue the consult for Acute Pain

6) Print updated list and sign out to OB resident on call

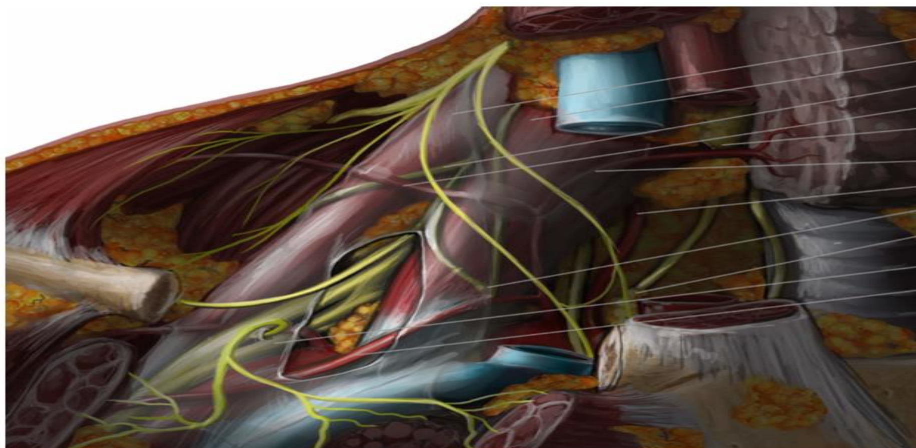
THE FOLLOWING SECTION IS ACADEMIC INFORMATION NEEDED TO MASTER THE NERVE BLOCKS

- ❑ **Upper extremity blocks**
  - ❑ **Supraclavicular nerve block and interscalene blocks**
- ❑ **Lower extremity block**
  - ❑ **Femoral nerve block**
  - ❑ **Fascia Iliaca Nerve block**
  - ❑ **Pericapsular nerve block**
  - ❑ **Adductor canal nerve block**
  - ❑ **Popliteal nerve block**
- ❑ **Abdominal wall block**
  - ❑ **Transversus abdominis wall block**
- ❑ **Chest wall blocks**
  - ❑ **Pectoralis I**
  - ❑ **Pectoralis II**
  - ❑ **Serratus Anterior**

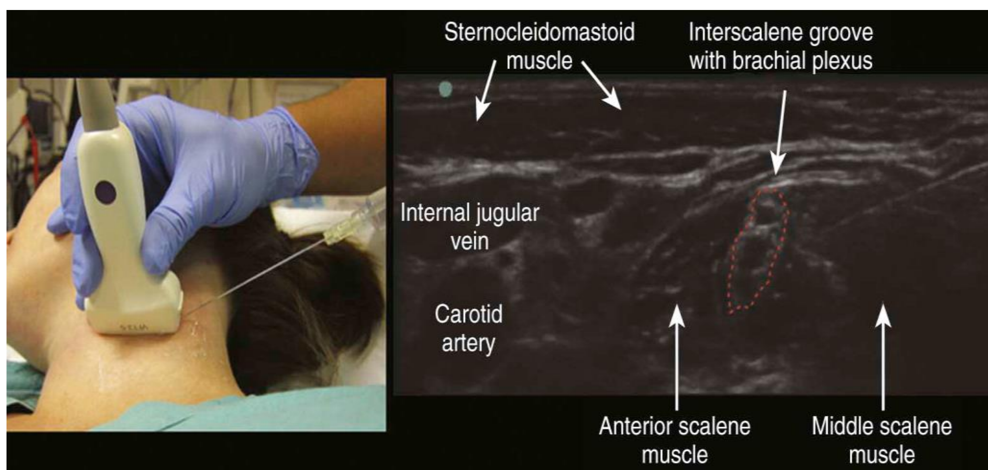
UPPER EXTREMITY BLOCKS:



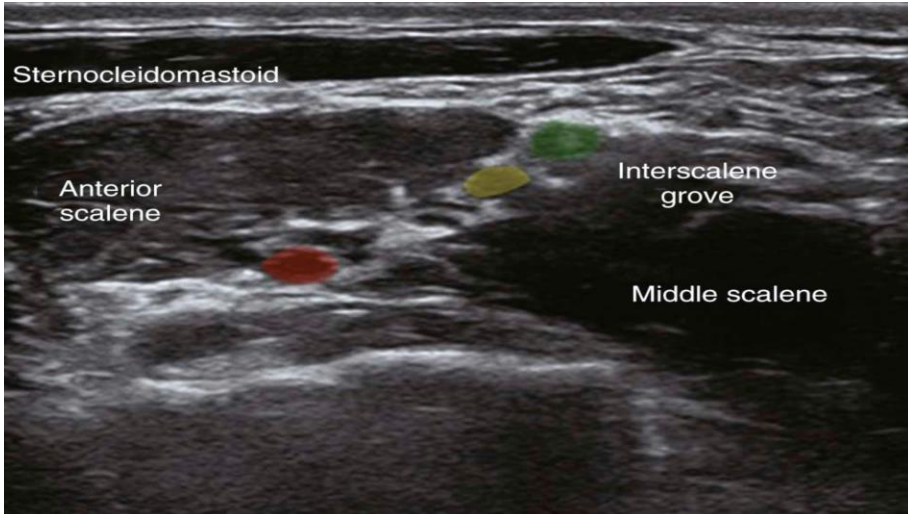
INTERSCALENE BLOCK



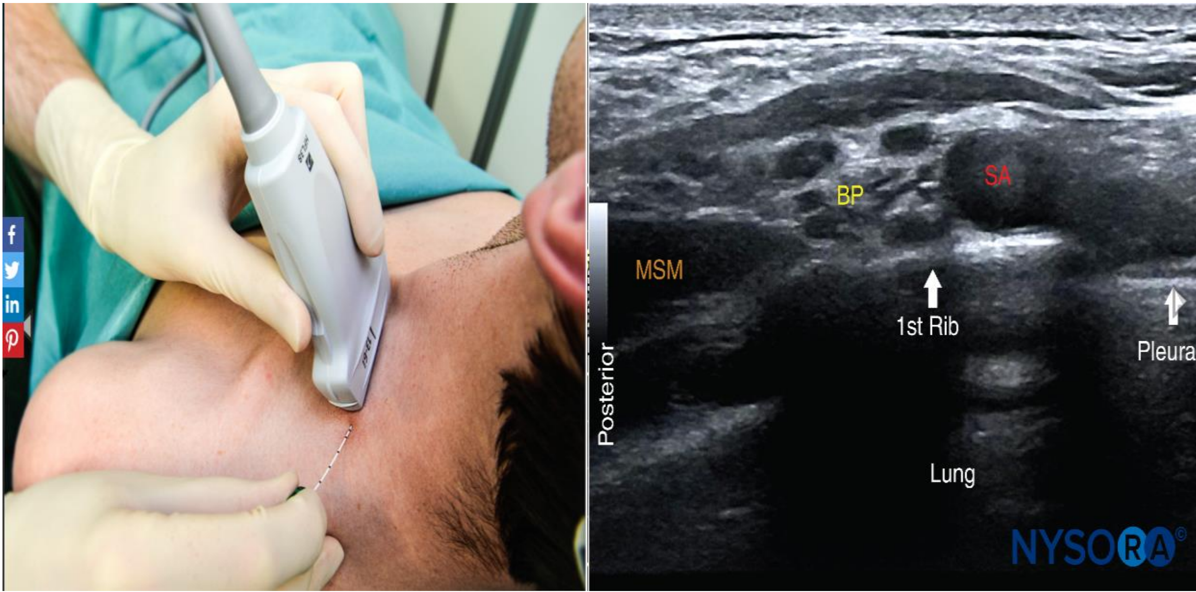
- ❑ Lateral to the carotid artery and internal jugular vein, between the anterior and middle scalene muscles.
- ❑ Indications: Shoulder and upper arm surgery



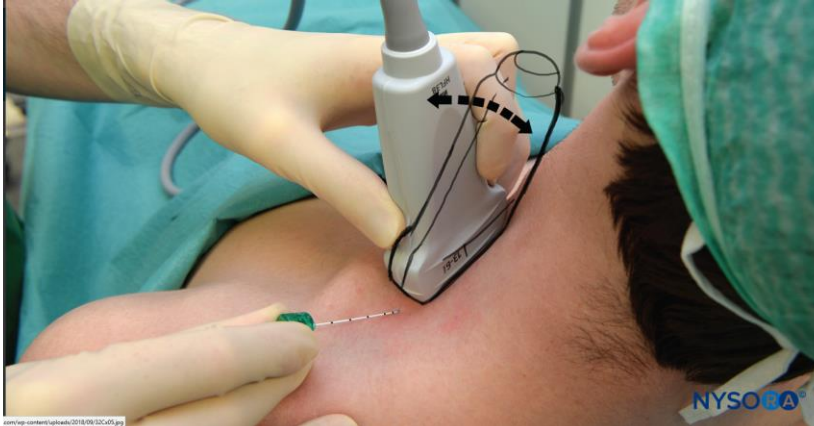
- ❑ Sternocleidomastoid muscles triangular structure: superficial to the anterior and middle scalene muscles beneath it.
- ❑ Brachial plexus roots lie between the anterior and middle scalene
- ❑ level of the cricothyroid notch (C6) at the interscalene groove.
- ❑ Needle placed just slightly behind the posterior border of the sternocleidomastoid muscle.



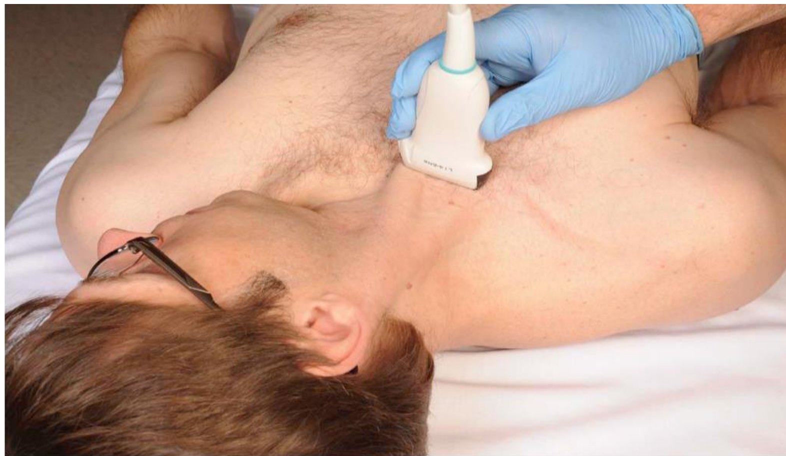
SUPRACLAVICULAR BLOCK



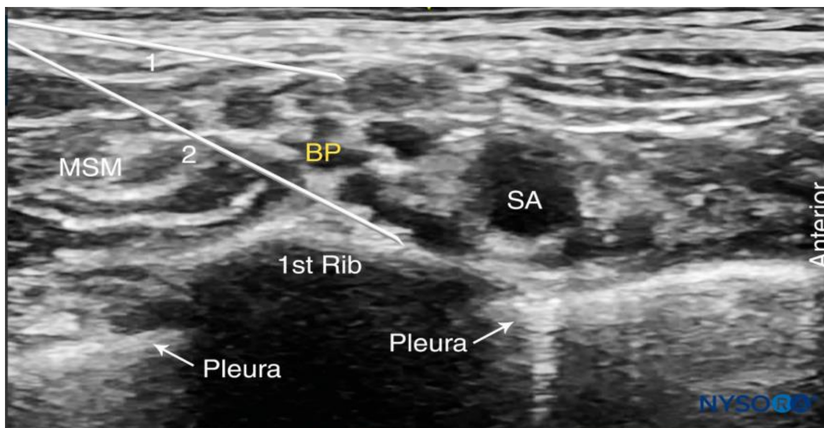
- ❑ **Indications:**
- ❑ **Arm, elbow, forearm, hand surgery; anesthesia for shoulder surgery is also possible.**



- **Transverse plane immediately proximal to the clavicle, slightly posterior to at its midpoint. The transducer is tilted caudally**

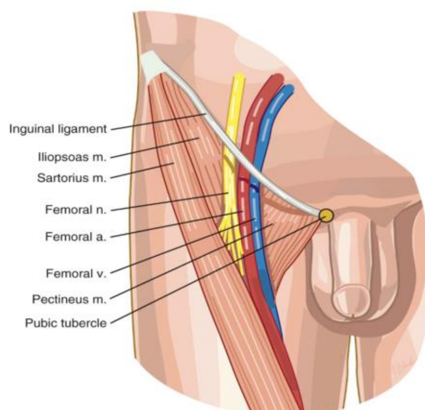


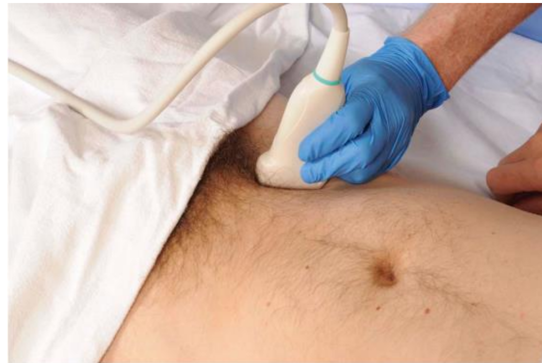
- **Lateral border of the sternocleidomastoid attaches to the clavicle**
- **Subclavian artery medially, the first rib inferiorly, and the brachial plexus superolaterally.**

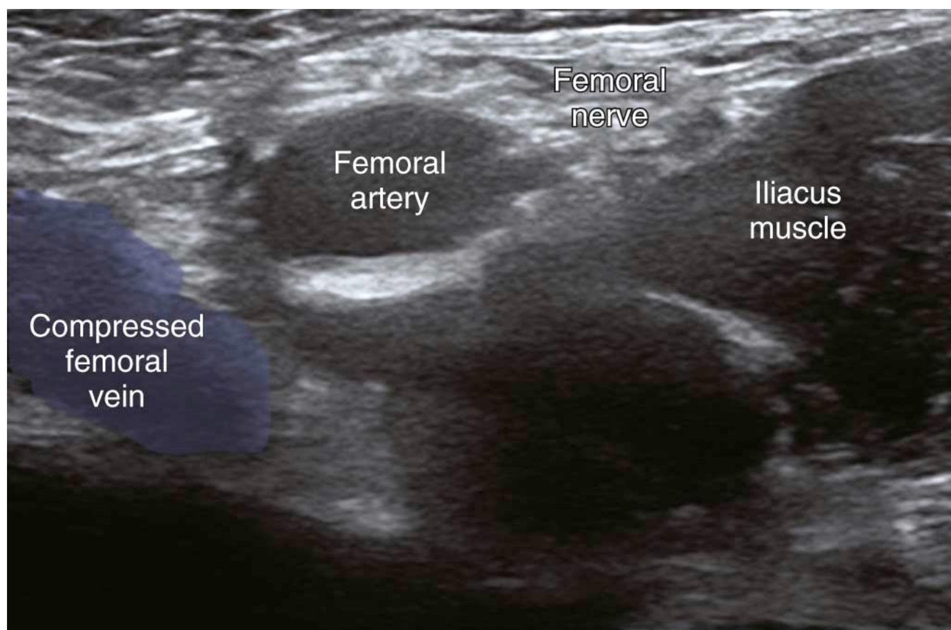


LOWER EXTREMITY NERVE BLOCKS

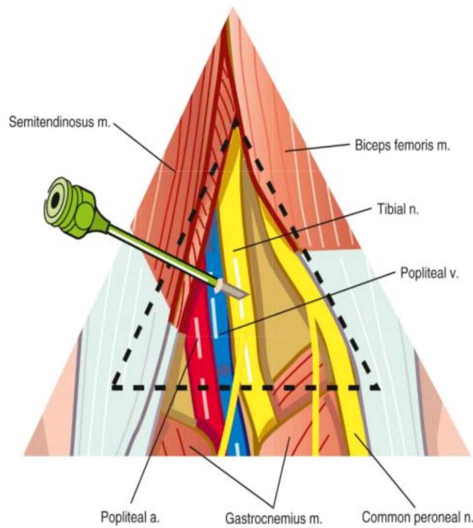
- The femoral nerve innervates anterior portion of the thigh and medial calf.
- Motor fibers to the iliac muscle and then passes beneath the inguinal ligament to enter the thigh.
- Lateral to the femoral artery as it passes beneath the inguinal ligament and is enclosed within the femoral sheath along with the femoral artery and vein.
- Motor fibers to the sartorius, quadriceps femoris, and pectineus muscles.
- Sensory fibers to the knee joint as well as the skin overlying the anterior thigh.

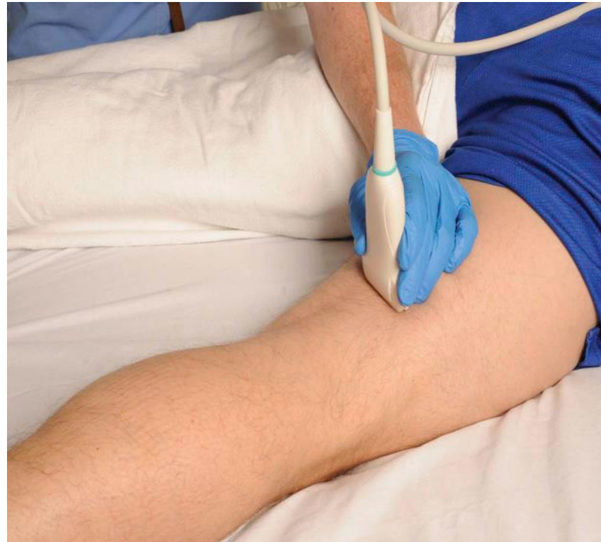


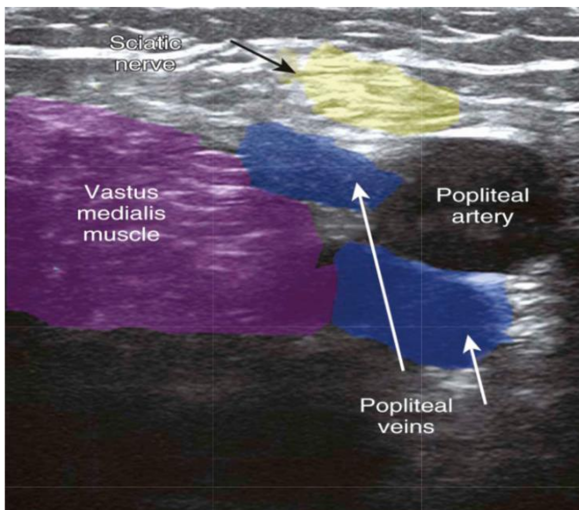


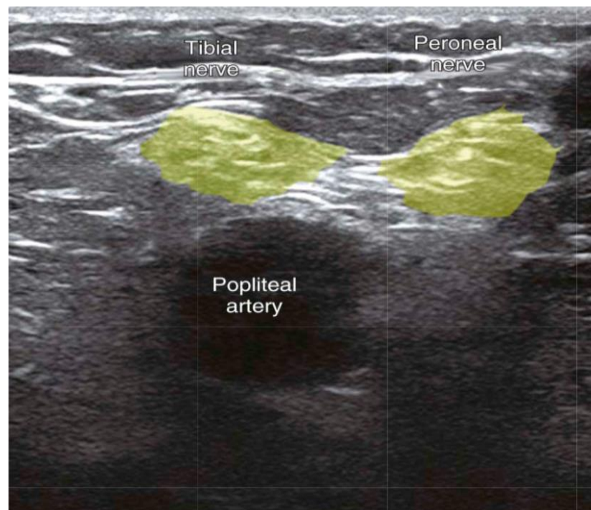


POPLITEAL NERVE BLOCKS









- ❑ **The pulsating popliteal artery should be visualized toward the bottom of the image, with the popliteal vein lying just lateral to the artery.**
- ❑ **Just superficial and slightly lateral to the popliteal vein is the sciatic nerve, which will appear as a bright hyper-echoic structure.**
- ❑ **Compression of the popliteal vein by application of pressure on the ultrasound transducer can aid in identifying the sciatic nerve, which lies just superficial to the vein.**

Innervation of the leg

Tibial: Posterior Compartment (Plantarflexion)

Superficial	*Deep*
1. Gastroc.	1. Popliteus
2. Plantaris	2. Flexor digitorum longus
3. Soleus	3. Flexor hallucis longus
	4. Tibialis posterior

Deep peroneal: Anterior Compartment

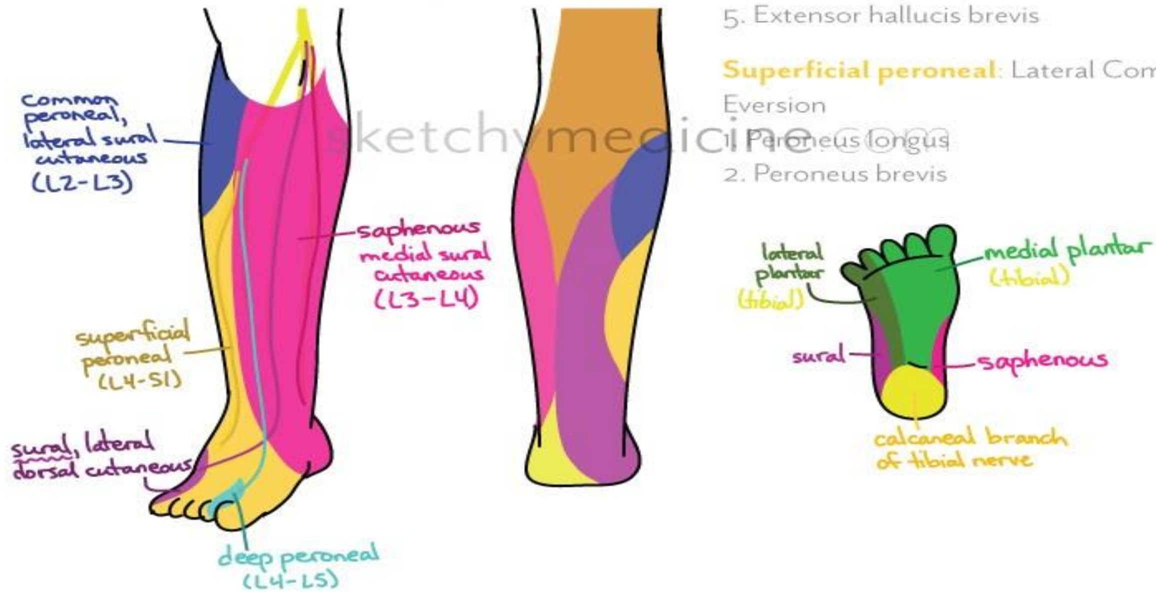
Dorsiflexion (*problems give you* ***foot drop***)

1. Tibialis anterior
2. Extensor digitorum longus
3. Extensor hallucis longus
4. Extensor digitorum
5. Extensor hallucis brevis

Superficial peroneal: Lateral Compartment

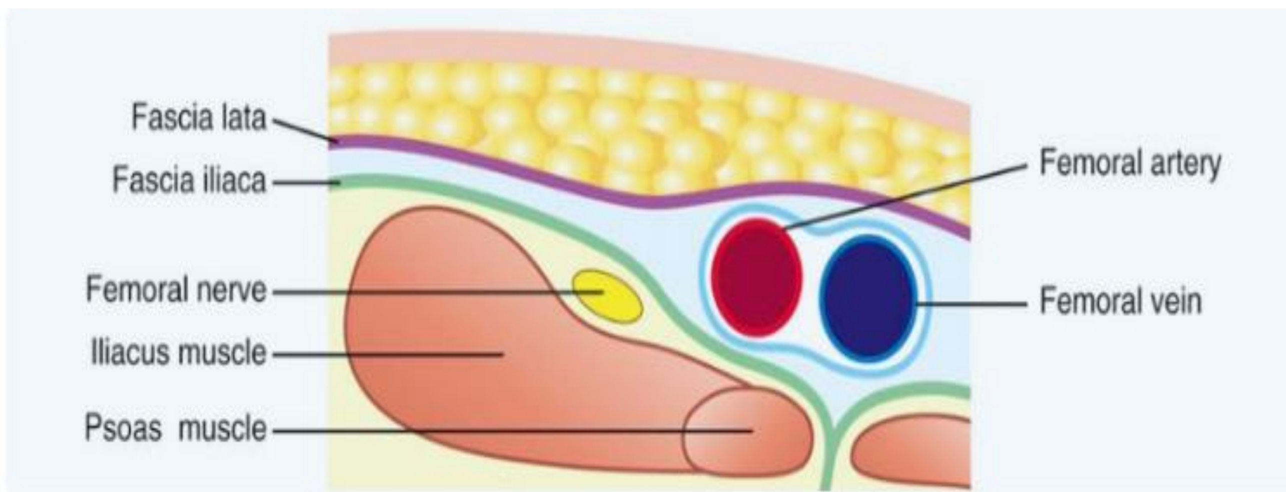
Eversion

1. Peroneus longus
2. Peroneus brevis

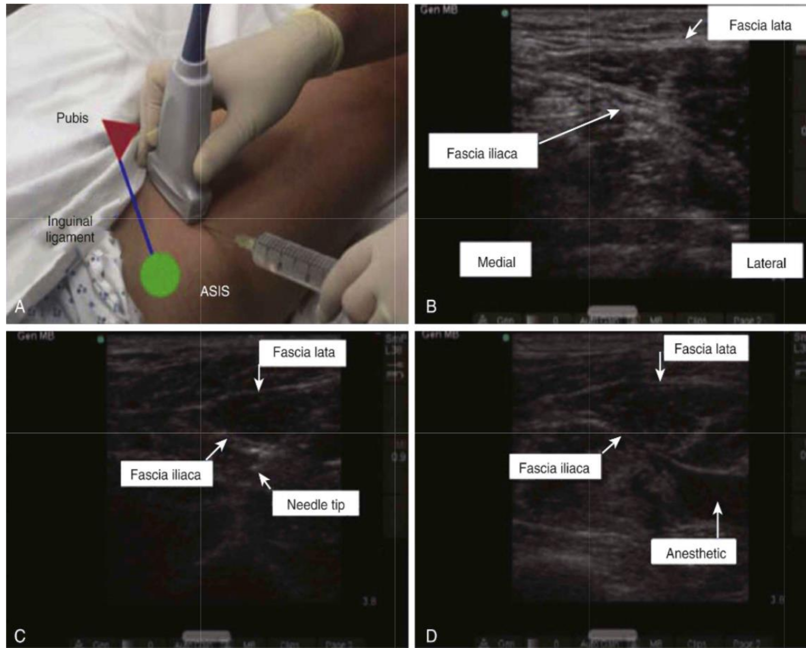


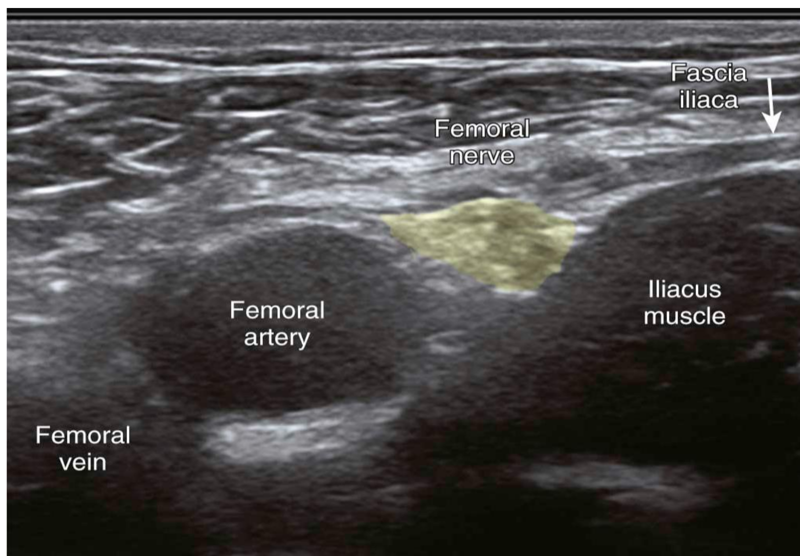
sketchymedicine.com

FASCIA ILIACA NERVE BLOCK:



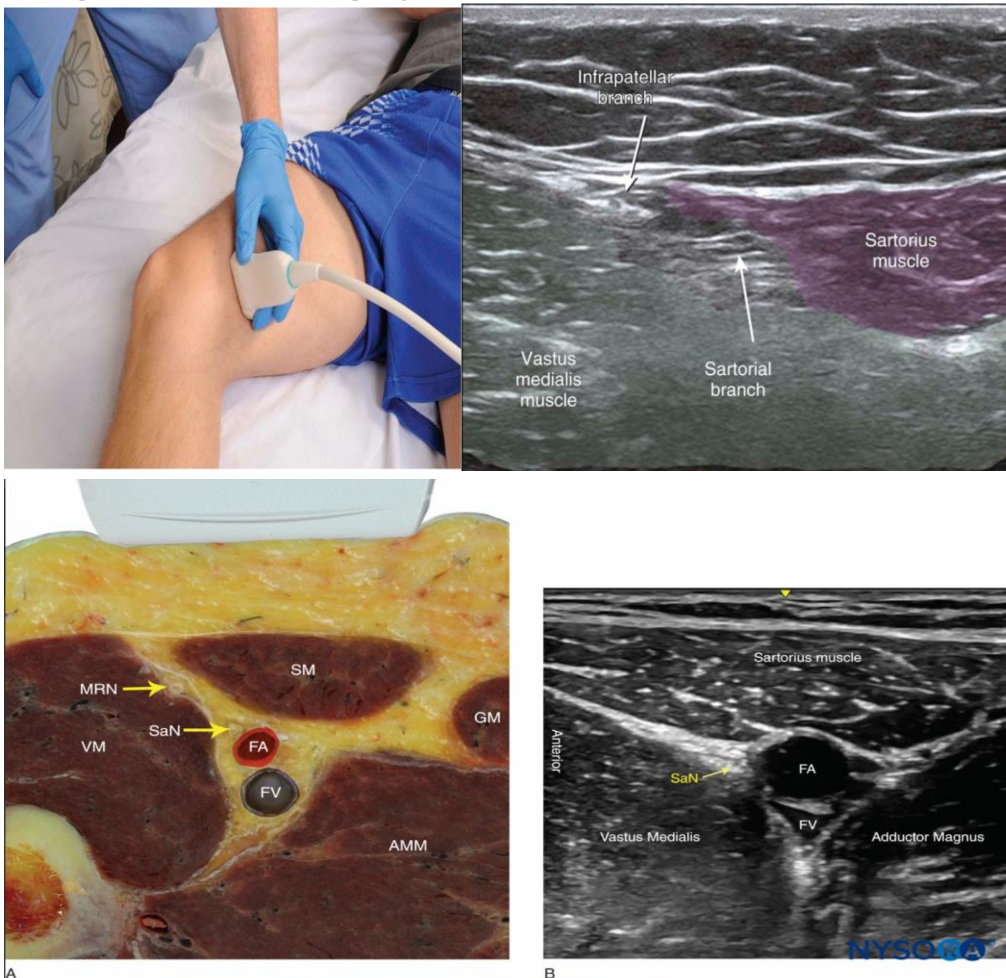
- Lateral border of the ultrasound transducer and advanced using an in-plane approach, with the trajectory adjusted under real-time ultrasound guidance until the needle tip is resting beneath the fascia iliacus





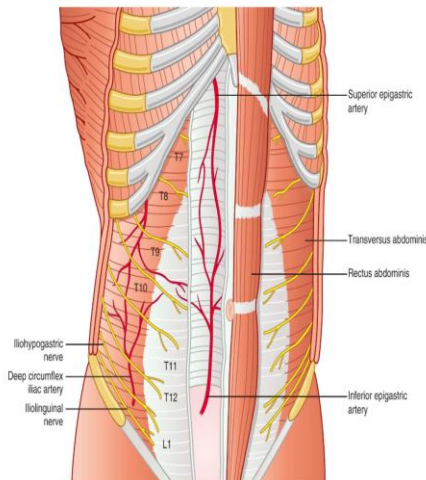
ADDUCTOR CANAL (SAPEHNOUS) NERVE BLOCK

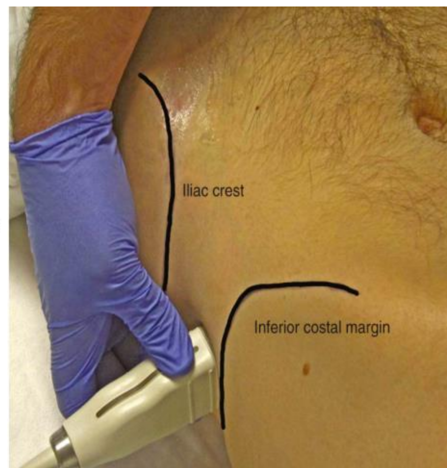
- ❑ Saphenous nerve largest sensory branch of the femoral nerve.
- ❑ Innervation: medial malleolus, medial calf, and portion of the medial arch of the foot.
- ❑ Fibers of the L3 and L4 nerve roots: travels along with femoral artery through Hunter's canal and moves superficially as it approaches the knee.
- ❑ Indications: saphenous vein stripping or harvesting; supplementation for medial foot/ankle surgery in combination with a sciatic nerve block, and analgesia for knee surgery.

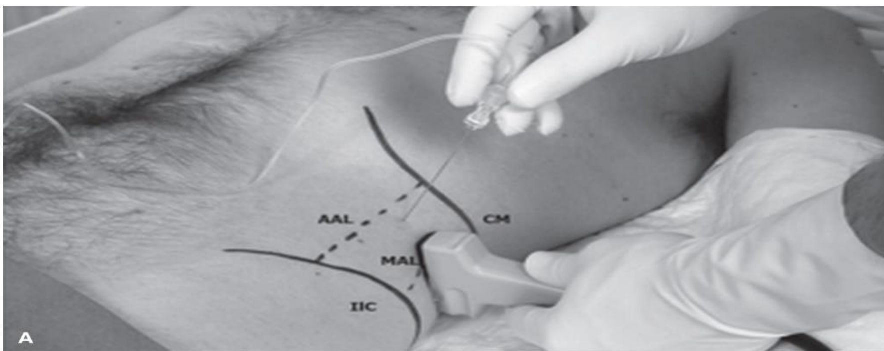


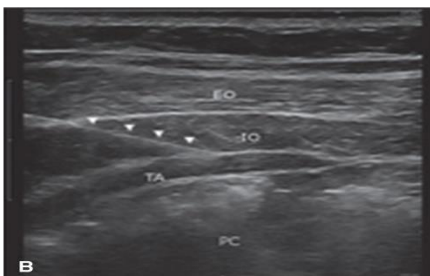
TRANSVERSUS ABDOMINIS PLANE BLOCKS:

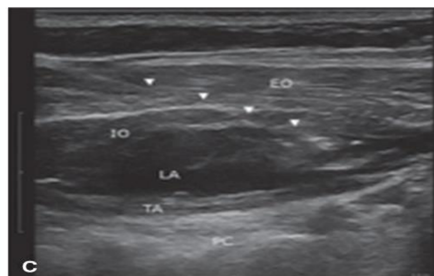
- Innervation of the anterolateral abdominal wall is provided by the lower six intercostal nerves and the first lumbar nerve
- The anterior branches of these nerves pass within a fascial plane between the internal oblique muscle and the transversus abdominis muscle, which makes them easily assessable for blockade with local anesthetic by placing a needle into this fascial plane.



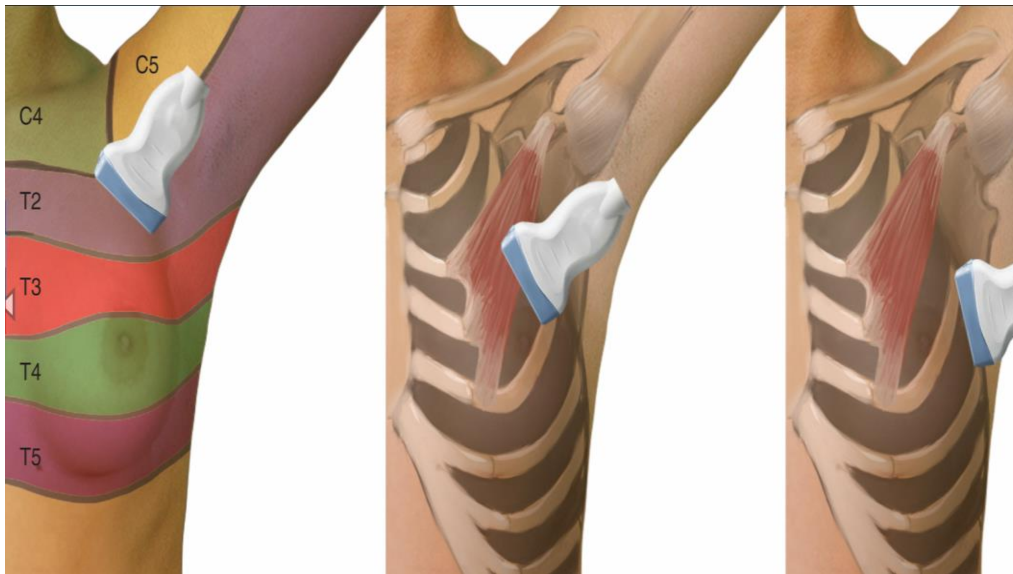






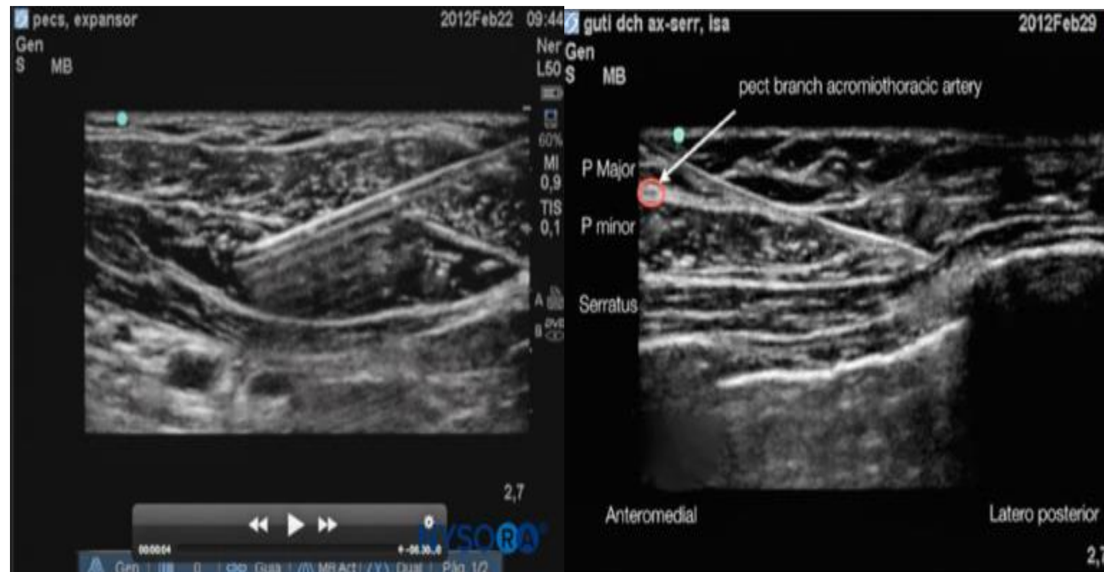


CHEST WALL BLOCKS



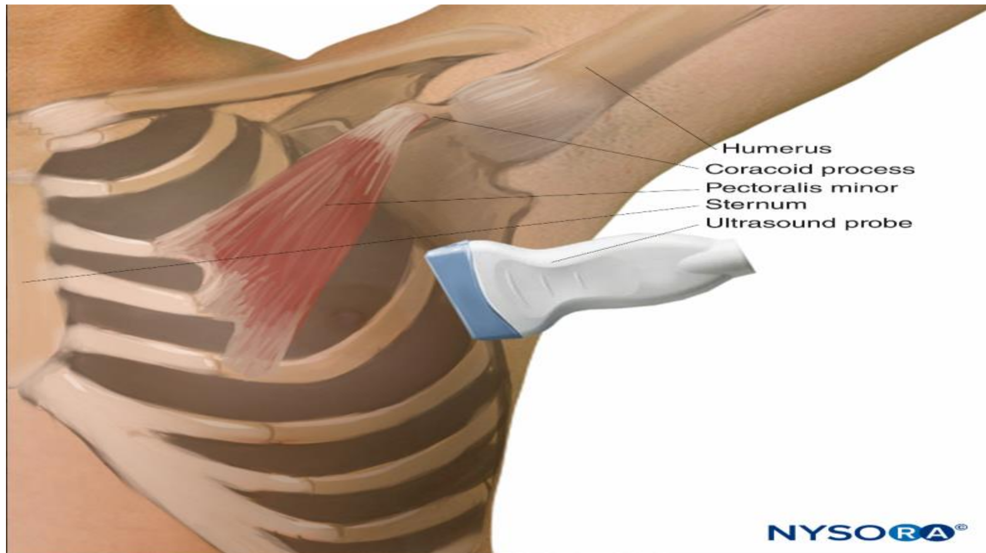
- Muscles: pectoralis major, pectoralis minor, serratus anterior, and subclavius muscles.
- Pectoralis major and minor muscles: lateral and medial pectoral nerves.
- Serratus anterior: innervated by the long thoracic nerve (C5, C6, and C7)
- In-plane needle trajectory from proximal and medial side toward the lateral side

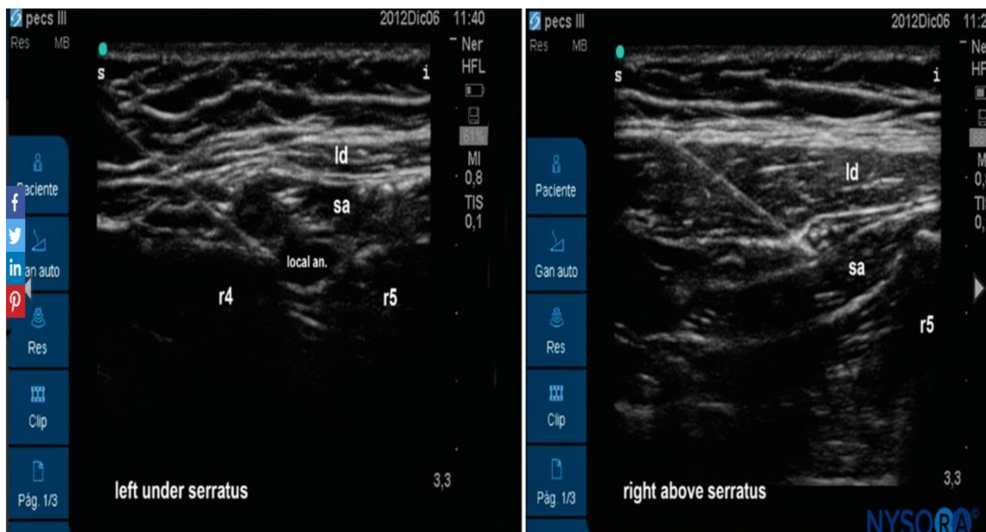
PEC 1 and PEC 2



❑ Analgesia for breast and lateral thoracic wall surgery

SERRATUS ANTERIOR





- ❑ **Latissimus dorsi and the serratus anterior muscles.**
- ❑ **Fourth and fifth ribs are identified.**
- ❑ **The transducer coronal plane**

LOMA LINDA UNIVERSITY
MEDICAL CENTER

ANTICOAGULATION GUIDELINES FOR NEURAXIAL PROCEDURES AT LLUMC

Guidelines to Prevent Spinal Hematoma following Epidural/Intrathecal/Spinal Procedures and Perineural Hematoma following Peripheral Nerve Procedures

***ATTENTION!** WHEN CAN YOU SAFELY DO NEURAXIAL/PERIPHERAL NERVE PROCEDURES OR GIVE ANTICOAGULANTS*
Neuraxial routes include epidural and intrathecal infusions, implanted intrathecal pumps, and spinal injections.
Peripheral routes include all peripheral nerve and plexus infusions. NOTE: Bloody tap/procedure? Acute Pain Service (4878)

MEDICATION	PRIOR TO NEURAXIAL/NERVE PROCEDURE Minimum time between last dose of anticoagulant and spinal injection OR neuraxial/nerve catheter placement	WHILE NEURAXIAL/NERVE CATHETER IN PLACE Restrictions on use of anticoagulants in patients with neuraxial/nerve catheters in place	AFTER NEURAXIAL/NERVE PROCEDURE Minimum time between neuraxial/nerve catheter removal and next anticoagulant dose
ANTICOAGULANTS FOR VTE PROPHYLAXIS			
heparin unfractionated 5000 units SQ q8 or q12 hr	6 hrs	May be given BUT: -Must wait 2 hr after catheter placement or spinal injection before giving dose -Must wait 6 hrs after last dose before REMOVING catheter Does not require Pain Service approval	1 hr
heparin unfractionated 7500 units SQ q8 hr	12 hrs	CONTRAINDICATED while catheter in place: may NOT be given unless approved by Pain Service Attending (4878)	4 hrs
dalteparin (Fragmin) 5000 units SQ qday	12 hrs (longer in renal impairment)	May be given BUT contact Pain Service regarding dose timing (4878) -Must wait 12 hrs after catheter PLACEMENT or spinal injection before giving dose -Must wait 12 hrs after last dose before REMOVING catheter	
enoxaparin (Lovenox) 40 mg SQ qday			
enoxaparin (Lovenox) 30 mg SQ q12hr	12 hours (longer in renal impairment)	CONTRAINDICATED while catheter in place: may NOT be given unless approved by Pain Service Attending (4878)	
fondaparinux (Arixtra) 2.5 mg SQ qday	72 hrs (longer in renal impairment)		
rivaroxaban (Xarelto) 10 mg PO qday	72 hrs (longer in renal impairment)	May be given BUT contact Pain Service regarding dose timing (4878) -Must wait 12 hrs after catheter PLACEMENT or spinal injection before giving dose -Must wait 12 hrs after last dose before REMOVING catheter	6 hrs
apixaban (Eliquis) 2.5 mg PO bid	72 hrs (longer in renal impairment)	May be given BUT contact Pain Service regarding dose timing (4878) -Must wait 12 hrs after catheter PLACEMENT or spinal injection before giving dose -Must wait 12 hrs after last dose before REMOVING catheter	
dabigatran (Pradaxa) 220 mg po qday	72 hrs depending on renal function		
betrixaban (Bevyxxa) 80 mg po qday	72 hrs		
apixaban (Eliquis) 10 or 5 mg PO bid	72 hrs (longer in renal impairment)	CONTRAINDICATED while catheter in place: may NOT be given unless approved by Pain Service Attending (4878)	6 hrs (48 hrs after a traumatic puncture)
dabigatran (Pradaxa) 75 - 150 mg PO bid	72 hrs (longer in renal impairment)		6 hrs
dalteparin (Fragmin) 200 units/kg SQ qday or 100 units/kg SQ q12hr	48 hrs (longer in renal impairment)		4 hrs

enoxaparin (Lovenox) >40 mg sq qday	48 hrs (longer in renal impairment)	CONTRAINDICATED while catheter in place: may NOT be given unless approved by Pain Service Attending (4878)	4 hrs
heparin unfractionated IV continuous infusion or greater than 5000 units sq bid or tid	When aPTT < 40 sec		
fondaparinux (Arixtra) > 2.5 mg sq qday	72 hrs (longer in renal impairment)		
rivaroxaban (Xarelto) 15 mg PO bid or qday; 20 mg PO qday	72 hrs (longer in renal impairment)		6 hrs
edoxaban (Savaysa) 30 – 60 mg po qday			
warfarin (Coumadin)	When INR < 1.5	May give one dose post op for patients with femoral or saphenous nerve catheters ONLY but must contact pain service (4878) to continue	4 hrs
DIRECT THROMBIN INHIBITORS			
argatroban IV continuous infusion	When aPTT < 40 sec	CONTRAINDICATED while catheter in place: may NOT be given unless approved by Pain Service Attending (4878)	4 hrs
bivalirudin (Angiomax) IV continuous infusion			
ANTIPLATELET AGENTS			
Aspirin/NSAIDS	May be given; no time restrictions for catheter placement or removal Do NOT call Pain Service		
abciximab (Reopro)	48 hrs	CONTRAINDICATED while catheter in place: may NOT be given unless approved by Pain Service Attending (4878)	6 hrs
cilostazol (Pletal)			
dipyridamole er/asa (Aggrenox)	7 days		
clopidogrel (Plavix)	7 days		
eptifibatide (Integrilin)	12 hrs (longer in renal impairment)		
prasugrel (Effient)	7 days		
ticagrelor (Brilinta)	7 days		
tirofiban (Aggrastat)	12 hrs (longer in renal impairment)		
cangrelor (Kangreal)	1 hrs		
THROMBOLYTIC AGENTS			
alteplase (TPA) 2 mg dose for catheter clearance or doses for chest tube clearance	May be given; no time restrictions for catheter placement or removal (Maximum dose 4 mg/24 hours)		
alteplase (TPA) full dose for stroke, MI, etc or IV doses for IR procedures	10 days	CONTRAINDICATED while catheter in place: may NOT be given unless approved by Pain Service Attending (4878)	10 days

Perioperative Care in ***Pancreas*** Surgery

Pre-op Assessment

- **Education** - Patient Instructions Handout; Ensure Pre-surgery®; Impact AR®; bath§ instructions§
- **Prehabilitation screening** - Nutrition and frailty assessments
- **Impact® Advanced Recovery§** - TID 5 days prior to surgery and continued post-operatively
- **Referrals** - Nutrition; Smoking Cessation; Cardiac Risk Stratification as needed
- **PACE** - Risk assessment; discuss neuraxial analgesia; further prehabilitation assessment/recommendations
- **EPIC** - pathway enrollment via OR case request and *Clinical Pathway Manager*

Day Before Surgery

- **Clear Liquid Diet** - until 3 hours before surgery
- **Hibiclens soap shower§** - remind during pre-op phone call
- **Carbohydrate Loading** - one bottle Ensure Pre-Surgery® at 6PM and one bottle prior to bed

Day of Surgery

Pre-op

- **Carbohydrate Loading** - one bottle Ensure Pre-Surgery® 3-4 hrs before surgery.
  (If known diabetic, check blood glucose on arrival to Pre-op and notify anesthesia if >180 mg/dL§)
- **Chlorhexidine (Hibiclens) surgical site cleaning** - to be done by Pre-op nursing
- **Acute Pain Consultation – on all patients.**
- **Acetaminophen - 1000 mg, PO, once**
- **Celecoxib - 200 mg, PO, once (unless cardiac contraindication, CrCl <60, or IBD)**
- **Gabapentin - 600 mg, PO, once (300 mg if CrCl <30, or >70-years-old)**
- **Neuraxial analgesia - PCEA/Single shot intrathecal opioid/TAP if neuraxial is contraindicated.**
- **SCDs** and Chemical **VTE prophylaxis** - Heparin, 5000 units, subcutaneous

Intraop

- **Ertapenem** - 1 g IV within 1 hour of skin incision§ (ciprofloxacin/metronidazole if PCN allergy)
- **Hemodynamic Management Strategy** - ID as "Green", "Yellow" or "Red" at timeout* (see page 2)
- **Ondansetron** and **dexamethasone** for pre-treatment of **post-operative nausea and vomiting** (PONV)
- Placement **OGT** vs **NGT** per surgeon discretion
- Placement of **G tube, feeding tube,** and **drains** per surgeon discretion
- If no neuraxial analgesia, **Local anesthetic** or consider Exparel® transversus abdominus plane (*TAP*) block
- **Maintain normothermia§** - forced air warmer (Bair Hugger™) if body temp <36°C
- **Anti-microbial coated suture, new gloves,** and **separate clean instruments** for fascial/skin closure§

PACU

- **Maintain normothermia§** - forced air warmer (Bair Hugger™) if body temp <36°C
- **Limit IVF** to 1 mL/kg/hr (max 125 mL/hr)

Day of Surgery - Post-op

Pain Management	IVF/Nutrition	Activity	Drain Care
Acetaminophen, 1,000 mg, IV, Q8hr (x24 hrs) **Ketorolac, 15 mg, IV, Q6hr** **Gabapentin, 250 mg, Jtube, BID** **Methocarbamol, 500 mg, IV, Q8hr** **IV opioids for severe/breakthrough pain**	If patient has G tube, keep to gravity Pantoprazole, 20 mg, IV, BID	Out of bed/to chair at least once the evening of surgery Incentive Spirometry SCDs	Strip & record output Qshift

Post-op Day 1

Pain Management	IVF/Nutrition	Activity	Drain Care
Acetaminophen, 1,000 mg, Jtube, TID **Celecoxib, 200 mg, Jtube, BID** **Gabapentin, 250 mg, Jtube, BID** **Methocarbamol, 500 mg, IV, Q8hr** **Oxycodone, 5 mg, Jtube, Q__hr, PRN moderate/severe pain** **Hydromorphone, 0.4 mg, IV, Q2hr, PRN breakthrough pain**	Limit IVF to 1 mL/kg/hr (max 125 mL/hr) Impact AR® PO TID vs J tube continuous feeds Start tube feeds if feeding tube or J tube placed Clamp G tube (if placed), unclamp if severe N/V Encourage gum chewing Pantoprazole, 20 mg, PO vs IV, BID	Remove urinary catheter (unless specific indication) Out of bed 60 minutes each shift Ambulate at least twice daily Incentive Spirometry SCDs; Lovenox, 40 mg, SQ, Qday	Strip & record output Qshift