

US-GUIDED REGIONAL ANESTHESIA BLOCKS

IMPORTANT REMINDERS:

- Use the **ED Regional Anesthesia Order Set** in EPIC.
- **Confirm the patient's ideal body weight (IBW)** and calculate the maximum dose of anesthetic (see RAR App below).
- Check on the intralipid supply in the ED.
- Save pre-procedure, US-guidance, and post-procedure clips.
- Complete *Qpath Proc_Needle Placement* worksheet.
- Monitor your patient for signs / symptoms of LAST.
- Add block details to the *Regional Anesthesia Log*.

Dept Pain Protocol



SUGGESTED SUPPLIES:

- Sterile Chloraprep
- Sterile US Probe Cover or Tegaderm
- 18G Blunt Fill Needle
- Syringe(s)
- Needle(s)
 - o 27G x 1½" needle
 - o SonoBlock needle
 - o Tuohy needle
- 3-Way Stopcock
- IV tubing (situational)
- Skin Marker (for admitted patients)

**** HELPFUL APPS / Websites ****

Calculate Doses (App)



Android



Regional Anesthesia
Reference
Andrew M Walters



Apple

Review Blocks (App)



Android



Nerve Block
Tom Fadial



Apple

Websites

NYSORA®



HIGHLAND EM
ULTRASOUND



Commonly Used Regional Anesthetics at MSMC

Anesthetic	Max Dose (mg/kg)	Onset (min)	Duration (hrs)
Lidocaine 1% (10 mg/mL)	4.5	2-5	1-2
Lidocaine 2% (20 mg/mL)	4.5	2-5	1-2
Lidocaine 1% with epinephrine	7	2-5	1-3
Ropivacaine 0.2% (2 mg/mL)	3	15-30	5-16
Bupivacaine 0.5% (5 mg/mL)	2	15-30	5-26
Bupivacaine 0.25% (2.5 mg/mL)	2	15-30	5-26

Ultrasound-Guided Regional Anesthesia Blocks

Nerve Block	Example Injury / Affected Tissue	Volume (mL)
Face / Head / Neck		
Greater Occipital nerve	Occipital neuralgia; migraines, cervicogenic, cluster HA	2-10
Greater Auricular nerve	Ear, mastoid, parotid, mandible angle	2- 5
Superficial Cervical Plexus	Clavicle fx; skin of inferior ear, submandibular region, lateral neck, cape of shoulder; IJV central line	2-5
Upper Extremities		
Brachial Plexus	Humerus fx, deltoid abscess	
- Interscalene	Shoulder dislocation, proximal/mid-humerus fx	10-20
- Supraclavicular	Elbow dislocation, distal radius fx	20-25
- Infraclavicular	Elbow, forearm, wrist	20-25
- Axillary nerve	Distal humerus, elbow, forearm, hand	20-30
RAPTIR (Retroclavicular, Infraclavicular)	Extensive UE coverage: shoulder, humerus, elbow, distal radius	20-50**
Musculocutaneous nerve	Elbow or lateral forearm	1-15
Radial, Median, Ulnar nerves	Forearm, wrist, or hand	2-10
Lower Extremities		
Fascia Iliaca Compartment Block (FICB)	Hip, femur, patella, tibial plateau fx; anterior thigh	20-40***
Pericapsular Nerve Group (PENG)	Intertrochanteric hip, femoral neck, acetabulum, pubic rami fx	20*
Femoral nerve	Hip, femur, patella, tibial plateau fx; anterior thigh	15-20
Transgluteal Sciatic nerve	Sciatica, posterior thigh	10-20
Popliteal Sciatic or Saphenous, Superficial Peroneal, Deep Peroneal, Sural, Posterior Tibial nerves	Lower leg, ankle, or foot; distal tib/fib fx, ankle and foot injuries, Achilles tendon rupture, sole of foot	5-20**
Trunk / Others		
Intercostal or Paravertebral nerves	Rib fx, chest tube insertion	2-5
PECS-II (Interpectoral + Pectoserratus)	Axilla lacerations or abscesses	10-20
Serratus Plane	Rib fx, chest wall abscess	15-30**
Rectus Sheath	Central abdominal wall laceration or abscess; hernia reduction	10**
Transverse Abdominus Plane (TAP)	Abdominal wall abscess, appendicitis, epiploic appendagitis	15-20***
Erector Spinae Plane (ESPB)	Hemithorax/hemiabdomen: posterior rib fx, herpes zoster, post-herpetic neuralgia, vertebral compression fx	25-30

*varies based on specific location

**dilute with 5-10cc NS

***dilute with 15-20cc NS