

76. Which of the following is incorrect based on the 2018 ASRA Checklist for managing Local Anesthetic Systemic Toxicity?

- A. The upper limit of lipid emulsion dosing is 12mL/kg
- B. Monitoring should be at least 4-6 hours after a cardiovascular event or at least 2 hours after a limited CNS event
- C. 20% lipid emulsion should be used as the initial drug at the first sign of a serious LAST Event
- D. Epinephrine doses of > 1mcg/kg are recommended

77. Which of the following statements is NOT true with regard to the management of new oral anticoagulants?

- A. Rivaroxaban (Xarelto) and Apixaban (Eliquis) should be held for at least 72 hours prior to neuraxial block
- B. Dabigatran (Pradaxa) should be held for 24 to 48 hours prior to neuraxial block in a patient with a compromised GFR
- C. Dabigatran can be reversed by the monoclonal antibody idarucizumab
- D. Factor Xa inhibitors, Rivaroxaban and Apixaban, can be effectively reversed with *andexanet alfa*

78. Which answer the correct spread of local anesthetic for an Erector Spinae Plane Block performed at the T5 level?

- A. Spread between the erector spinae muscle and rhomboid muscle
- B. Spread lateral to the transverse process, superficial to the erector spinae muscle
- C. Spread deep to the erector spinae muscle at the transverse process
- D. Spread deep to the costotransverse ligament, pushing the pleura ventrally

79. When assessing the lungs with ultrasound, which of the following signs are suggestive a pneumothorax:

- A. Absence of lung sliding
- B. Presence of "comet tails"
- C. Absence of a "lung point"
- D. Presence of B-lines

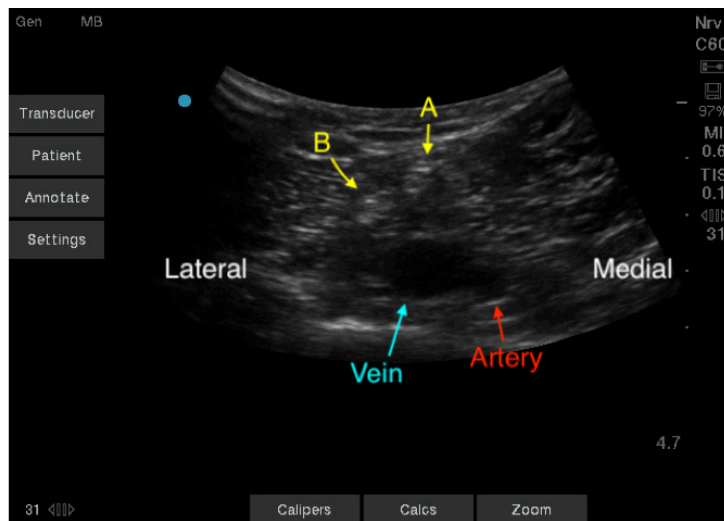
80. Innervation of the anterolateral aspect of the knee joint is MOST likely derived from which nerve?

- A. Nerve to the Vastus Medialis
- B. Obturator
- C. Saphenous
- D. Common peroneal

81. Which medication, has been associated with serotonin syndrome in the perioperative period?

- A. Midazolam
- B. Fentanyl
- C. Sugammadex
- D. Propofol

82. A 47 year-old female is having a total knee arthroplasty with an iPACK block for postoperative analgesia. For the iPACK block, the ultrasound probe was placed on the posterior thigh a few centimeters above the knee popliteal crease and the following ultrasound image was obtained. Match the following letters with the anatomical structure:



- A. A= peroneal nerve, B = tibial nerve
- B. A= tibial nerve, B = peroneal nerve
- C. A= femoral nerve, B = tibial nerve
- D. A= tibial nerve, B = femoral nerve

83. In which type of regional anesthesia type is the use of programmed intermittent bolus dosing supported by the literature?

- A. Transversus abdominis plane catheters
- B. Thoracic epidural catheters
- C. Labor analgesia epidural catheters
- D. IPACK block catheters

84. The orthopedic surgeon asks for tranexamic acid administration for hip hemiarthroplasty in a 92-year-old patient with a history of CAD s/p CABG, a pulmonary embolus 6 months ago, poorly-controlled asthma, and type II diabetes on insulin therapy. Which patient factor or comorbidity is a relative CONTRAINDICATION to tranexamic acid therapy?

- A. Persistent- moderate asthma
- B. History of CABG within 12 months
- C. Pulmonary embolus
- D. Age greater than 75 years

85. Which statement best describes where local anesthetic is deposited during a transmuscular quadratus lumborum block (also known as TQL, QL3 or anterior QL block)?

- A. The tissue plane between the quadratus lumborum and psoas muscles
- B. The tissue plane between the quadratus lumborum muscle and erector spinae muscles
- C. The tissue plane deep to the lateral border of the quadratus lumborum muscle
- D. The tissue plane between the erector spinae muscles and the transverse processes of the lumbar spine.

86. The following statements about liposomal bupivacaine are true, EXCEPT:

- A. It is FDA approved for local surgical infiltration, including TAP blocks
- B. The liposomal encapsulation of bupivacaine results in a longer duration of drug release.
- C. After its administration, other non-liposomal formulations of bupivacaine may be given after a delay of 48 hours
- D. The liposomal structure may be disrupted if it contacts chlorhexidine or povidine iodine.

87. An obese 48-year-old female receives a subgluteal sciatic nerve block using a combination of ultrasound and nerve stimulator guidance. The needle is advanced with the nerve stimulator set to 1.2 mA current, 0.1 msec pulse width, and 2 Hz. While advancing the needle, a motor response (twitch) is detected, with plantar flexion of the ankle noted. What is the BEST next step in performance of the block?

- A. Inject local anesthetic in 5 mL increments after negative aspiration.
- B. Decrease stimulator current while adjusting needle position to maintain a twitch between a current of 0.5 to 0.7 mA.
- C. Redirect the needle to obtain elicit dorsiflexion of the foot
- D. Redirect the needle to elicit a more favorable response of hamstring muscles twitch.

88. A 70-year-old female is scheduled for an open pancreatectomy. You decide to place a thoracic epidural at T7-8 for intra-operative and post-operative analgesia. After unsuccessful attempts at finding the epidural space using a midline approach, you convert to a paramedian approach. Which of the following is NOT a reason to use paramedian approach instead of the midline approach?

- A. Avoidance of steeply-angled spinous processes with tips that point caudally
- B. Improved predictability of the depth to the epidural space
- C. Avoidance of supraspinous and interspinous ligaments and potential for false loss of resistance
- D. Avoidance of epidural veins, which are usually found midline in the epidural space

89. Pterygopalatine ganglion (or sphenopalatine) blockade will provide analgesia for all the following conditions EXCEPT:

- A. Mandibular surgery
- B. Migraine, cluster headache
- C. Postdural puncture headache
- D. Cleft palate repair