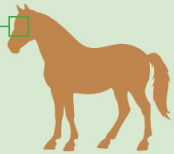
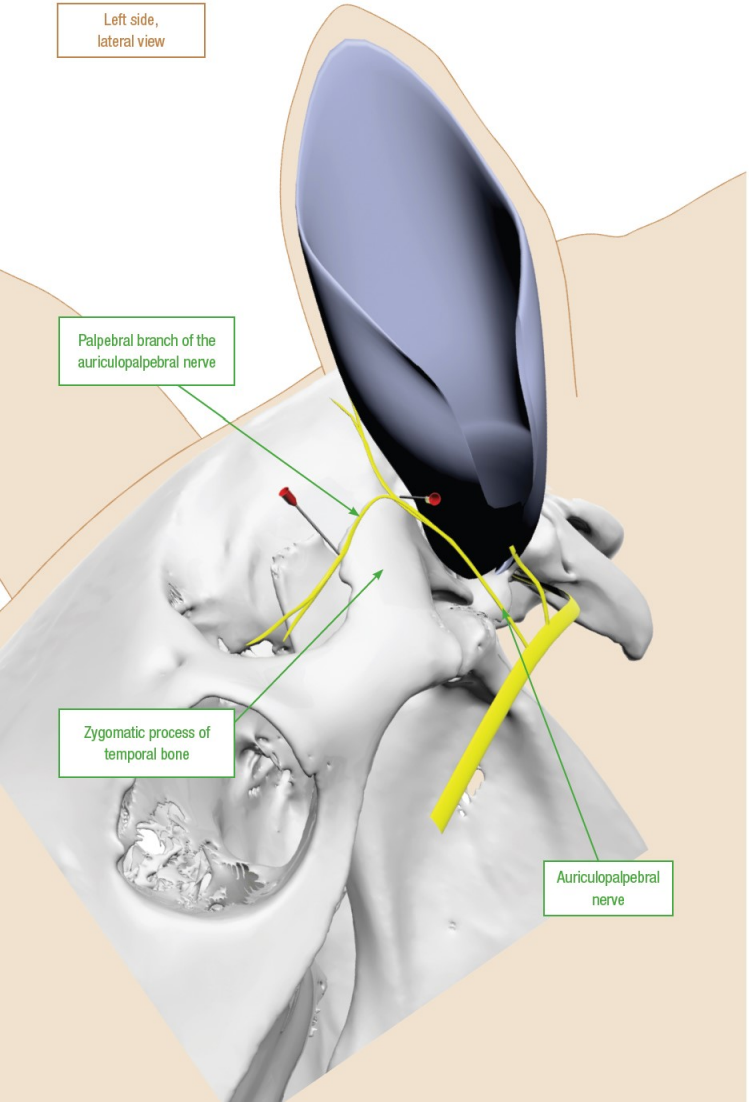
AURICULOPALPEBRAL AND PALPEBRAL NERVE BLOCKS

Needle: Auriculopalpebral nerve: 5/8 in (1.6 cm), 25 ga
Palpebral nerve: 5/8 in. (1.6 cm), 25 ga
Volume: Auriculopalpebral nerve: 5 mL
Palpebral nerve: 1 to 2 mL





The upper and lower eyelids can be paralyzed to facilitate examination or topical treatment of the eye by anesthetizing the **auriculopalpebral nerve or its palpebral branch.**[180] Either of these nerve blocks can also be administered to relieve blepharospasm or spastic entropion associated with a corneal ulcer or abscess, and either can be administered multiple times daily, as needed, for many days.[180] The **auriculopalpebral nerve** can be anesthetized with 5 mL of local anesthetic administered subfascially at a depression just rostral to the base of the ear, palpated at the intersection of an imagined line extending dorsally from the caudal border of the vertical ramus of the mandible and a line imagined parallel to the dorsal aspect of the zygomatic arch.[181] The nerve cannot be palpated at this site. Local anesthetic is injected through a ⅝-inch, 25-gauge needle inserted to its hub. The needle is redirected dorsally and ventrally during injection. Alternatively, 1 to 2 mL of local anesthetic is injected subcutaneously over the **palpebral branch of the auriculopalpebral nerve,** which can be palpated as it crosses the dorsal aspect of the zygomatic arch halfway between the lateral canthus of the eye and the base of the ear. Anesthesia of the auriculopalpebral nerve or its palpebral branch paralyzes the orbicularis oculi muscle but provides no regional anesthesia. Absolute paralysis of the eyelids (akinesia) may not occur because a portion of the orbicularis oculi muscle may be partly innervated by minor branches of the dorsal buccal nerve.[180] The upper eyelid is paralyzed, but paralysis of the lower eyelid may be incomplete.[182]

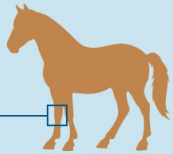


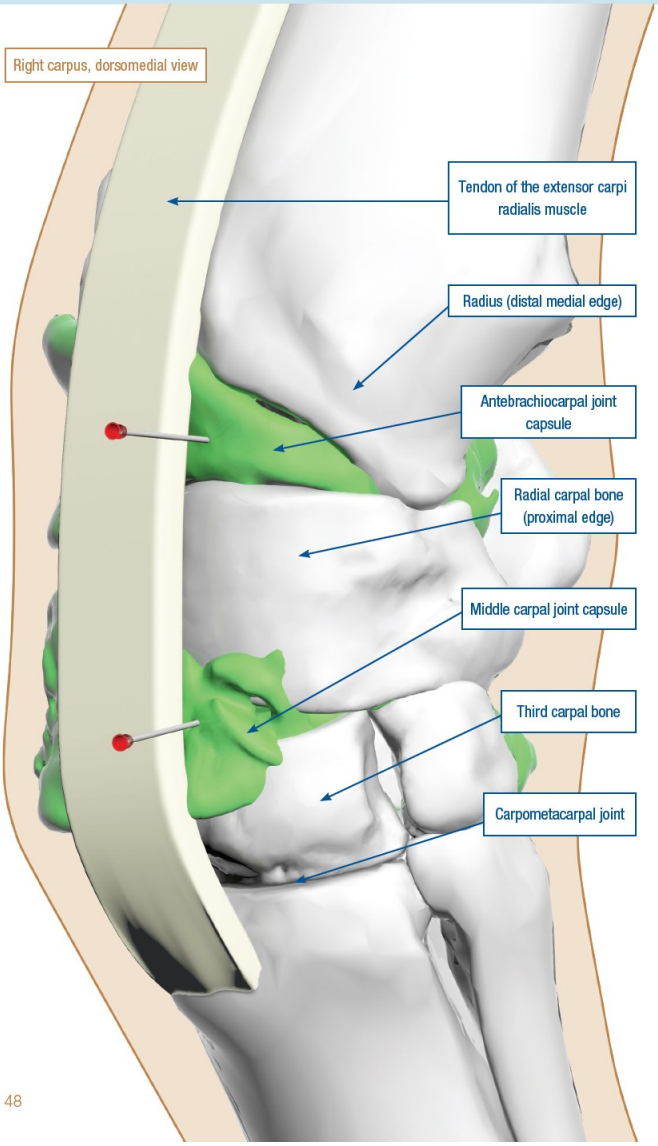
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CARPUS

DORSAL APPROACH

Needle: 1 to 1.5 in (2.5 to 3.8 cm), 20 ga
Volume: 5 to 8 mL for the antebrachiocarpal (radiocarpal) and middle carpal (intercarpal) joints



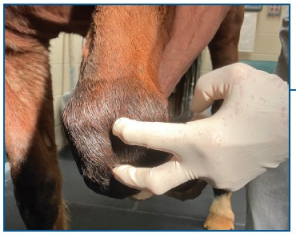


The **antebrachiocarpal (radiocarpal)** and **middle carpal (intercarpal) joints** can each be entered with ease. **The carpometacarpal joint communicates with the middle carpal joint and therefore does not require separate entry.**

Using the **dorsal approach,** enter the **antebrachiocarpal (radiocarpal) and middle carpal (intercarpal) joints** with the limb held and the carpus flexed. Locate the radiocarpal joint by palpating the dorsodistal edge of the radius and the dorsoproximal edge of the radial carpal bone. Insert the needle midway between these 2 structures and medial or lateral to the edge of the palpable tendon of the extensor carpi radialis muscle. The joint capsule is penetrated at a depth of about 0.5 inch (1.3 cm).

Locate the **middle carpal joint** by palpating the dorsodistal edge of the radial carpal bone and the dorsoproximal edge of the third carpal bone. The technique of needle insertion is similar to that for the antebrachiocarpal joint.

Ford et al[113] and Moyer et al[114] showed that the palmar outpouchings of the carpometacarpal joint capsule extend into the fibers of the proximal portion of the suspensory ligament. **The clinician should therefore assume that a local anesthetic injected into the middle carpal joint will enter the carpometacarpal joint and may desensitize the origin of the suspensory ligament.**



Palpate the **antebrachiocarpal (radiocarpal) and middle carpal (intercarpal) joints** medial or lateral to the palpable tendon of the extensor carpi radialis muscle. *Note: The left carpus is being palpated.*



Insert the needle into the **antebrachiocarpal (radiocarpal) joint.** *Note: Needle is in the left carpus.*



Insert the needle into the **middle carpal (intercarpal) joint** medial or lateral to the palpable tendon of the extensor carpi radialis muscle. *Note: Needle is in the left carpus.*