

Defining Injection Types

- *Subcutaneous* - Any injection below the dermis in the subcutaneous space.
- *Intradermal* - Any injection into the dermal space (which is below the epidermis).

Two points of clarification when differentiating subcutaneous and intradermal injections:

- Since there is no defined subcutaneous tissue plane in the eyelids, injections into the eyelid are placed in the dermal plane hence they are most correctly referred to as intradermal.
- A defined subcutaneous plane appears again beyond the rim of the orbit in the skin of the face enabling the administration of true subcutaneous injections.

Common Subconjunctival Medications and Dosages

- Xylocaine (1% lidocaine with or without epinephrine): 0.5mL to 1mL
- Kenalog-40 (Triamcinolone suspension 40mg/1ml vial): 20mg to 40mg
- Ceftriaxone (500mg vial): 100mg
- Vancomycin (500mg vial): 25mg

Subconjunctival Injection Materials List

- Topical ophthalmic anesthetic (proparacaine, tetracaine)
- Topical broad spectrum ophthalmic antibiotic such as fluoroquinolone or PolyTrim (polymyxin B sulfate and trimethoprim ophthalmic solution, Allergan)
- Desired injectable medication
- Alcohol prep pads
- Eyelid speculum
- 0.12mm or 0.3mm 1x2 micro-ophthalmic toothed forceps
- 2.0cc, 2.5cc or 3.0cc syringe
- 18g 1½" needle for drawing up medication
- 25g, 27g, or 30g ½" needle for injection of medication
- +/- 4% lidocaine and sterile cotton swab
- +/- technician or assistant

Intramuscular Injection Materials List

- Desired medication to be injected
- Alcohol prep pads
- 1.0cc to 3.0cc syringe
- 18g 1½" needle for drawing up medication
- 25g to 27g 1" to 1½" needle for injection of medication (¾" for children)
- Cotton swab and bandage
- 0.9% sterile saline (if needed for creating a solution).