

Pearls

Martin Fleishman, MD, PhD, on

Taking the 'ouch' out of IM antipsychotics

Long-acting intramuscular (IM) antipsychotics are necessary for patients who do not respond to—or comply with—oral medication regimens. We can make these injections less painful, provided that agitation does not complicate treatment.

In 25 years of practice, I've discovered the following ways to diminish the pain of injection:

- **Inject into the deltoid's posterior aspect.** Nociceptive pain fibers may be less dense in the posterior versus the anterior deltoid. I try to inject latitudinally about 1 cm behind the deltoid midline and longitudinally about 5 cm below the acromioclavicular joint.
- **Inject into the lateral gluteus** to avoid stimulating the sciatic nerve that runs down the medial gluteus.
- **Have the patient fold his or her arm across the lap.** Muscles that are relaxed before injection are less likely to hurt afterward. The arm's flexed position will help relax the deltoid.
- **Massage the muscle area overlying the injection site** for about 10 seconds before injecting. This further relaxes the muscle.
- **Inject slowly**—about 30 seconds per cc. A faster injection can increase pain.
- **Inject air into the vial before withdrawing.** Commonly used injectable psychiatric drugs are based in sesame oil. Withdrawing these viscous medications through the perforation site can be difficult if the vial is partially evacuated and the remaining fluid is under negative atmospheric pressure.

Some clinicians use the "Z technique" to prevent backflow when injecting IM antipsychotics.

With this method, skin and subcutaneous tissue are retracted to avoid creating a straight-line needle tract that would allow the ready backflow of injected material.

I feel this method is unnecessary for decanoate preparations; they are viscous enough to prevent significant backflow provided the injection is slowly administered.

To IM or not to IM

Where possible, administering medications subcutaneously instead of intramuscularly can also reduce pain.

Contrary to popular belief, fluphenazine decanoate can be administered subcutaneously, using a 5/8-inch, 22-gauge needle for patients who fear long needles or are exquisitely sensitive to pain. IM administration is required for haloperidol decanoate, however.

50 vs. 100 mg/cc

Choice of preparation can also promote post-injection comfort. I have heard patients occasionally complain of lingering muscular discomfort after receiving the 100 mg/cc haloperidol decanoate preparation, but I have never heard such complaints after administering haloperidol, 50 mg/cc, or fluphenazine, 25 mg/cc.

DRUG BRAND NAMES

Fluphenazine • Prolixin

Haloperidol • Haldol

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