

Thal Equine Client Handout: Intramuscular (“IM”) Injections

This handout is intended for clients that are comfortable and willing to administer intramuscular injections and have horses that are relatively well-behaved during this process. It is only recommended when the client is fully advised by their veterinarian or has communicated with their veterinarian about the situation calling for such an injection. If you are unsure or your horse is needle-shy, you need to consult with me or another equine veterinarian to develop an appropriate plan.

Administering any type of medication to a horse by any route requires thought and attention. Intramuscular (“IM”) injections are no exception. IM injections are very safe if done properly but if done improperly they can lead to serious complications. Below are some suggestions for giving a safe IM injection. Sterility is paramount in handling a needle, syringe, the bottle containing the medication, and the injection site.

PREPARATION

Use a new sterile needle each time. Handle the needle by the hub only and don’t touch the needle shaft. Keep it capped until ready to inject. Wipe off the rubber top of the medication bottle with an alcohol swab.

Attach the covered needle to the syringe, remove the needle cap and fill the syringe with air. Then insert the needle into the bottle. While tilting the bottle upside down, inject air into it to produce some back pressure, then slowly withdraw the solution into the syringe. Fill the syringe with a few more cc’s than required. Then inject that small extra amount back into the bottle with any obvious air. This is all

accomplished with the initial single needle stick into the inverted bottle. Withdraw the needle from the bottle.

Hold the syringe with the needle pointed upward, tapping your finger along the barrel of the syringe. This moves any bubbles to the neck (needle end) of the syringe so you can push the plunger up a bit to force out any remaining air. Now you have only the prescribed amount of injectable medication in the syringe. Recap the needle.

GIVING AN INJECTION

Have the horse stand in a location where it would not hurt itself or you or damage equipment if a problem should arise. Have another person hold the horse with a sturdy halter and rope. The horse should be held and observed for 2 minutes after the injection for any signs of an unfavorable reaction.

Select an injection site, see diagram below. The neck is a commonly used site and works well when giving only a few injections. When giving a series of injections over several days or weeks, alternate among the 4 locations – 2 sites on each side of the horse. Alternating locations helps to reduce local reactions and soreness.

Brush off any dirt and debris from the injection site and swab the skin with an alcohol-soaked cotton ball. If giving the injection in the neck, we recommend leaving the needle attached to the syringe. Pinch the skin tightly near where you plan to give the injection. Let the horse adjust to this for a few seconds. While continuing to pinch with one hand, gently but firmly push the needle into the neck in the desired site at right angles to the skin and to depth of the needle hub.

When injecting sites other than the neck, first detach the needle from the syringe and remove the needle cover. Just before you insert the needle firmly tap the area near the insertion site with your finger so to reduce the chance that the horse will react to needle insertion. Gripping the needle

hub (do not touch the shaft), quickly plunge the needle into the muscle up to the hub. Remember, rapid needle insertion is less painful than slow insertion. If blood appears at the needle hub, withdraw the needle and reinsert it at a different location. Re-attach the syringe to the needle and gently withdraw the plunger a short distance. If any blood is withdrawn into the syringe, the tip of the needle is probably in a vessel. If this happens, partially withdraw the needle and angle it slightly before reinserting it. You need not remove the needle completely from the skin when redirecting it. Again gently withdraw the syringe plunger to check for blood.

If there is no blood at the needle hub, inject the medication very slowly. When injecting more than 10 cc, it is preferable to spread the medication into a few injection sites. To do this, inject the first 10 cc. Rather than removing the needle completely from the skin, partially withdraw and redirect the needle and give another 10 cc. Remember to "pull before you push" at each site to avoid putting medication into a vessel. Repeat this in different directions until all the medication has been given.

Try to avoid injecting air into the horse. If for some reason you inject a small amount of air, it will not be of serious consequence, but is best to avoid injecting large amounts. Quickly withdraw the needle. Recap the used needle and properly dispose of it. You should return the used needles to us for proper disposal.

ADVERSE DRUG REACTIONS

If, as you are giving the injection, the horse stiffens its neck, becomes very alert in the eyes, flicks its ears, moves around, and increases its rate of breathing, immediately stop the injection. This rare adverse reaction can progress to more agitated behavior, such as jumping forward, circling, stumbling and sometimes collapse. Such reactions can last 1 to 10 minutes. There is no treatment except to try to prevent

the horse from injuring you, your assistant, or itself. Most horses survive this unusual reaction. Such a reaction may be a result of accidental injection into a vessel or an allergic reaction. It is most commonly seen with penicillin injections.

LOCAL SWELLING

When giving a series of injections, alternating injection sites helps reduce post injection swelling. If the horse develops swelling in an injection area, apply a hot pack to the site for 15 minutes twice daily. Never use a swollen site for another injection. If the site continues to increase in size and pain persists 1-2 days after the injection, please call our office immediately.

Call us if you have any questions concerning the intramuscular injection procedure or if your horse has any adverse reaction to the drug or the injection.

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