

Sequoia Veterinary Hospital, Inc

1409 El Camino Real Redwood City California 94063

650.369.7326 / 650.369.4403 (fax)

Subcutaneous Fluid Administration

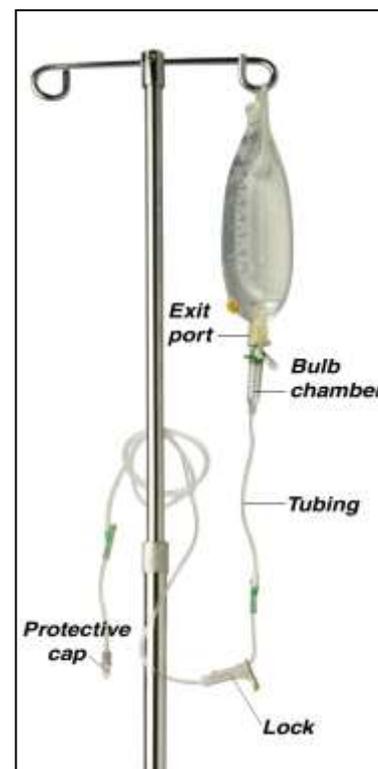
Administration of supplemental fluids can benefit cats and dogs with a variety of medical conditions. Most commonly, this is recommended for cats with kidney disease. We recommend that you learn this technique for your pet. Don't be alarmed - it is normal to feel reluctance about this. Giving injections is outside the comfort zone for most everyone outside the medical profession. However, fluid administration is not nearly as difficult as it sounds. The benefits provided to your pet will make it well worth your time to learn this simple technique which you can quickly become very comfortable with.

What equipment is involved?

- A bag of IV fluids
- An IV drip set (a tube that connects the fluid bag to the needle)
- A needle
- A sharps disposal container

How do I put it together?

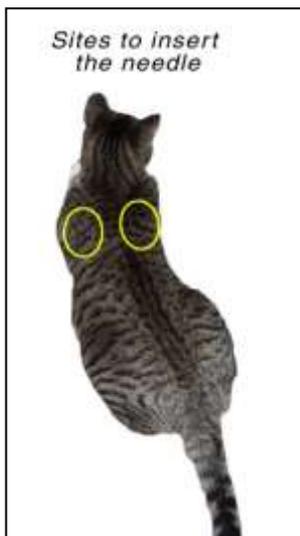
1. Remove the IV fluid bag from the outer, protective bag.
2. Remove the IV drip set from its package.
3. The top end of the IV drip set has a large, pointed end with a protective cap. Remove this cap and discard. Do not allow the exposed end of the drip set to become contaminated - IT SHOULD NOT TOUCH ANYTHING.
4. Pull the protective covering from the exit port on the bottom of the IV bag. This will expose a hole that will receive the pointed end of the IV drip set.
5. Push the pointed end of the IV drip set into the open hole of the IV bag. It must be seated firmly to prevent leaks.
6. Close the lock in the middle of the IV tubing by moving the roller down. (The lock on a new IV drip set is often already in the open position.)
7. Gently squeeze and release the bulb at the top of the drip set until the bulb chamber is about half full with fluid.
8. Remove the protective covering from the lower end of the IV drip set, but do not discard it. Do not allow the end of the drip set to become contaminated - IT SHOULD NOT TOUCH ANYTHING.
9. Open the lock (roller) on the tubing by moving the roller upward and then hold or suspend the IV bag; fluid should flow freely. Allow the entire drip set to be filled with fluid.
10. Close the lock on the IV line by moving the roller downward.
11. Break the protective covering around the needle so that the open end (not the sharp end) is exposed. Do not allow it to become contaminated by allowing it to touch ANYTHING.
12. Place the open end of the needle on the lower end of the IV drip set. Seat it firmly.



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How do I insert the needle?

Insert the needle just under the skin in one of several locations that have unusually loose skin. These include:

- At the level of the shoulder blades, just to the right and to the left of midline.
- At the level of the back legs, just to the right and to the left of midline.

What is the correct technique?

1. Choose a location where you will treat your pet. This may be on a table, countertop, or on your lap.
2. Hang the IV bag about 3 feet (1 meter) above the level of your pet's head.
3. Place your pet in the treatment location. Be sure both of you are in a position that will be comfortable for about 10-15 minutes. The end of the IV drip set should easily reach your pet.
4. Pick up a roll of loose skin in one of the above locations.
5. Lay the point of the needle at the base of the roll of skin with the needle horizontal and pointing to your pet's head. This assumes that your pet is in an upright or standing position.
6. Advance the needle slightly forward while pulling the roll of skin backward. That should place the point of the needle under the skin.
7. Release the roll of skin. The point of the needle should remain under the skin.
8. Grasp the IV drip set lock in one hand and begin the flow of fluids by moving the roller upward.

NOTE: Some cats are more cooperative if they are placed in a box not much larger than the cat. A cardboard cat carrier is often the correct size.

How much fluid should I give each time?

The instructions at the end of this handout tell how much to give for your cat's specific situation. As a rule, the average sized cat should receive 100-150 ml of fluids at one time. If you are using two spots, you should give half of that amount in each location.

When you have given the prescribed amount, complete the following steps:

1. Stop the flow of fluids by moving the roller in the IV drip set lock downward firmly. If you do not close it well and the bag is left hanging, fluid will leak out.
2. Remove the needle from the skin and replace its protective cap.
3. PLACE A NEW, STERILE NEEDLE ON THE DRIP SET AS SOON AS YOU ARE THROUGH. This keeps bacteria that were picked up on the old needle from migrating into the fluids. Used needles must be disposed of properly.
4. Store the equipment in a safe place until the next fluid administration. Once a fluid bag has been punctured with a drip set, it should not be used for a longer period than 2 weeks.

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What other tips do I need to know?

It is not necessary to "sterilize" the skin with alcohol before inserting the needle. In fact, wiping a little alcohol on the skin does not really sterilize it, and the odor may actually aggravate your pet because of the feel or taste. Many cats and dogs may drool profusely if able to taste alcohol.

Most dogs and cats tolerate fluid administration quite well. However, if the fluids are unusually cold or hot, they may be uncomfortable. Ideally, they should be stored at about body temperature. However, as long as they are at room temperature most pets are fine. Do not refrigerate them.

As the fluids are running, a lump will form under the skin. Do not be alarmed; this is the pocket of fluid that will be absorbed over several hours. If absorption is slow, gravity may cause the fluids to migrate downward. They could move under the skin of the front or rear legs. However, if this happens, they will still be absorbed.

There is no problem if a few bubbles of air are injected under the skin. If quite a bit of air gets under the skin, you may feel a crackling sound when you push on the skin, and your pet may experience mild discomfort for a couple of hours, but no real harm will occur. The body will eventually absorb the air.

What to do if the fluids stop running

This often happens when the end of the needle moves against the skin or the underlying tissue. Do not remove the needle; rather, gently reposition it until the fluids begin to flow again. Experiment with the needle's position until the fluids flow freely. Twisting the needle will change the position of the bevel. This may be all that is needed.

What to do if the fluid runs slowly on subsequent treatments

When you are finished giving fluids, you should close the lock firmly. However, closing the lock firmly may crush the tubing so that fluid will not flow well on subsequent use. If this happens, move the lock to another place on the IV tubing, and open the crushed area of the tube by pinching it with your fingers.

What to do if the fluids become cloudy in appearance

If any cloudiness or discoloration occurs, do not use the bag. It usually means that the fluids have become contaminated with bacteria. If you administer these fluids to your pet, a serious infection may occur under the skin. Reusing needles or using one IV drip set from one fluid bag to the next will also introduce bacteria into the fluid bag and could cause serious infection under the skin.



SPECIFIC INSTRUCTIONS FOR YOUR PET

1. Give _____ ml of fluids at each treatment.
2. Treat your pet every _____ days or _____ times per week.
3. Return _____ for further tests to monitor treatment progress.