

Subcutaneous Fluid Administration

Administration of supplemental fluids can benefit pets with a number of different medical conditions. Most commonly, fluid supplementation is recommended for pets with kidney disease. Although the idea of giving fluids may initially be intimidating, we encourage you to consider learning this technique. It is very normal to feel some anxiety about this but we believe that you will find that it is not nearly as difficult as it would seem. The potential benefit to your pet will make it well worth your time to learn this simple technique.

Supplies

The equipment consists of a bag of IV fluids, an IV drip set, and a needle. The IV drip set is simply a tube which connects the fluid bag to the needle. Although it initially seems complicated, you will soon become very comfortable with the procedure described below. Your veterinarian will you supply with the fluids, drip set and needles.

Connecting the Fluid Line to the IV Bag

1. Remove the outer, protective bag from the inner IV bag.
2. Remove the IV drip set from its packaging.
3. Close the lock in the middle of the IV tubing by moving the roller. (The lock on a new IV set is often already in the open position.)
4. The top end of the IV drip set has a large, pointed end with a protective cap. Remove this cap, but do not permit it to become contaminated. IT SHOULD NOT TOUCH ANYTHING.
5. Pull the protective covering from the exit port on the bottom end of the IV bag. This will expose a hole that will accept the pointed end of the IV drip set.
6. 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.
7. Remove the protective cap from the lower end of the IV set, but do not discard it. Do not permit it to become contaminated. IT SHOULD NOT TOUCH ANYTHING.
8. Gently squeeze and release the bulb at the top of the drip set until the bulb chamber is about half full with fluid.
9. Open the lock (roller) on the tubing and then hold or suspend the IV bag; fluid should flow freely.
10. Be sure that all air bubbles run out of the tubing.
11. Close the lock on the IV line by rolling the roller downward.
12. Remove the protective cap on the lower end of the IV set.
13. Break the protective covering around the needle so that the open end (not the sharp end) is exposed. Do not permit it to become contaminated by allowing it to touch ANYTHING.
14. Remove the protective cap from the lower end of the IV set, and place the open end of the needle on it. Seat it firmly by twisting it on.

Insertion of the Needle

Remove the colored cap from the needle.

If the roller clamp has a slit in it, put the cover in the slit to prevent loosing it during use.

Insert the needle just under the skin in at the level of the shoulder blades, just to the right and to the left of the middle of the back

Fluid Administration

- Choose a location where you will treat your pet. This may be on a table, counter top, in the floor or in your lap or in the bathroom. The size of the pet will determine a suitable location.
- Hang the IV bag about 3 feet (1 meter) above the level of your pet's head. Hanging the bag from the shower rod in the bathroom is an easy place to hang it.
- Place your pet in the treatment location. Be sure both of you are in a position that will be comfortable for about 5 minutes. The end of the IV set should easily reach your pet.
- Pick up a roll of loose skin in one of the above locations.
- Lay the point of the needle at the base of the roll of skin with the needle horizontal and pointing to the pet's head. This assumes that the pet is in an upright or standing position.
- Advance the needle slightly forward while pulling the roll of skin backward. That should place the point of the needle under the skin. Be sure the needle is all the way in the skin.

- Release the roll of skin. The point of the needle should remain under the skin.
- Grasp the IV set lock in one hand. Begin the flow of fluids by rolling the roller upward.

Amount of Fluid to Give

Your veterinarian will instruct you as to how much to give, and how often.

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

- Stop the flow of fluids by rolling the roller in the IV set lock downward firmly. If you do not close it well and the bag is left hanging, fluid will drip.
- Remove the needle from the skin and replace its protective cap.
- PLACE A NEW, STERILE NEEDLE ON THE DRIP SET AS SOON AS YOU ARE THROUGH. This keeps bacteria which were picked up on the old needle from migrating into the fluids. If you wish, you may return it to our hospital for proper disposal. Alternatively you can purchase a red "sharps" container from your drug store. These are specially made container used by diabetics and other people requiring routine injections. Your pharmacy will tell you what to do with the container when it is full or you can return it to your veterinarian for final disposal.
- Store the equipment in a safe place until the next fluid administration.

General Considerations

It is not necessary to "sterilize" the skin with alcohol before inserting the needle. In reality, wiping a little alcohol on the skin does not really sterile it, and the odor and feel of alcohol may aggravate your pet. Many animals will taste the alcohol and begin to drool.

Most pets tolerate this procedure 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 a 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. However, if this happens, they will still be absorbed.

There is no problem is 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 harm will occur. The body will eventually absorb the air.

Troubleshooting

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 while it is inserted in the skin until the fluids begin to flow again. Experiment with the position of the needle until the fluids flow freely.

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.