

GIF-Tube[®] Client Packet

Client Procedure & Information Guide

US Patent
6,520,949

Provided by PractiVet[®], Inc.

You and your veterinarian have chosen to use the GIF-Tube to treat your pet's kidney disease. The GIF-Tube is designed to allow you to painlessly deliver large volumes of subcutaneous fluids to your pet. Veterinarians worldwide have now used this procedure to improve the quality of life of thousands of patients.

Your pet's tube may function for months to over a year without the need for replacement. How long the GIF-Tube remains functional depends upon the care you use when you maintain the tube as well as your pet's individual response.

Experience has shown that most GIF-Tubes will continue to function well unless a low-grade infection occurs. These low-grade infections are frequently the result of reuse of IV lines or using fluids that have been open for over 12 hours. The information provided in this brochure is designed to assist you and your veterinarian in providing the highest level of care for your pet.

Labeled GIF-Tube Components

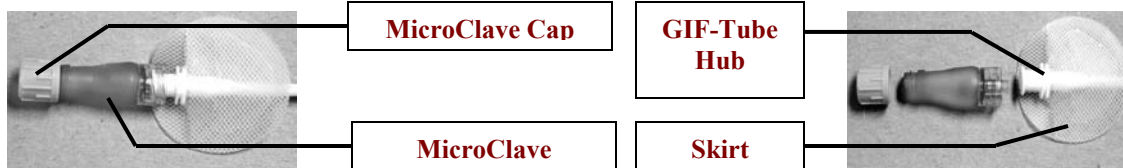


Fig. 1

Fig. 2

Protection of Exposed Components

Your pet has sutures placed around the periphery of the skirt of the Gif-Tube. It is very important that these sutures remain comfortable for your pet because they will remain for the life of the tube. Inflammation around the stitches will lead to scratching by your pet. If any inflammation develops around the stitches, your veterinarian can provide some medication for you to place on the site. If a stitch is broken or pulled through the skirt, you should contact your veterinarian. They can generally be easily replaced without the need for general anesthesia.

We strongly recommend that you have your veterinarian place **Soft Paws[®]** silicone nail caps on your pet when he/she places the GIF-Tube. **Soft Paws** last around 2 months and give your pet a chance to get adapted to the GIF-Tube. If your pet does not have **Soft Paws**, it is important to keep the nails trimmed; and, it is recommended to keep the site covered until your pet becomes accustomed to the device. Many people adapt a cut-off tube sock to cover the exposed parts. Another option is to purchase a special cover designed by one of our GIF-Tube users for her cat. It is available online at www.hoochcrf.com.

Preparation for Home Care Treatment

Supplies You Will Need

Your veterinarian has provided you with fluid bags (**we recommend 250ml bags for cats & small dogs**), IV lines and MicroClave changes for the treatment of your pet. He/she may have provided these individually, or in a package called the **GIF-Tube Client Kit[®]**. The **GIF-Tube Client Kit** contains all of the supplies you will need except for the fluids and disinfectant supplies. To find out what is included in the **GIF-Tube Client Kit**, refer to **Frequently Asked Questions** in this booklet.

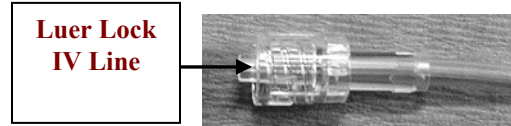
If you are not using the **GIF-Tube Client Kit**, check your IV lines to be certain there is a **luer lock (Fig 4)** on the end. IV lines without a luer lock (**Fig. 3**) **do not lock into the MicroClave securely** and are not recommended with this system.

Fig. 3



**Non-Luer
Lock
IV Line**

Fig. 4



**Luer Lock
IV Line**

Besides the IV lines & fluids, you will need a **suitable disinfectant***, gauze pads or cotton balls, a container such as small paper cup, and a plastic fork or tweezers. (**Forceps provided in GIF-Tube Client Kit**)

***WE STRONGLY RECOMMEND THAT ONE OF THE FOLLOWING DISINFECTANTS BE USED:**

- 1:10 chlorine bleach solution which has been **freshly mixed** by adding ½ measuring teaspoon bleach per 1 ounce of water. **Mixed chlorine bleach is only good for 1 treatment because it destabilizes once mixed.**
- Undiluted Nolvasan® (Chlorhexidine) surgical prep solution. (Available from your veterinarian)

Warming of Fluids

Always warm **UNOPENED** fluid bags in microwave **prior to placing the IV line in the IV bag**. Depending on the power of the microwave, **250 ml bags** will warm to body temperature in **20-30 seconds** and **1000ml bags** in **50-60 seconds**. The bag should feel comfortable against your skin. **Never administer fluids that feel hot to the touch.** In special situations, fluids must be administered twice daily. **In those situations** in which the fluids will be reused **within 12 hours** the opened bag with IV line attached may be refrigerated and warmed prior to treatment. **Special instructions for this procedure are included in the Frequently Asked Questions section on page 4.**

Home Care Treatment of the Pet

Video CDs of this procedure are available from your veterinarian, or can be viewed online at www.practivet.com

1. Disinfect Hands (**very important**)
2. Open the package containing the IV line, leaving both end caps in place. (Fig. 5)
3. Close the Pinch Clamp (**make sure the tubing is in the center of the clamp or the fluids will leak through the line**). If you are using a roller clamp, roll to the down position. (Picture of pinch clamp in Fig. 6)
4. Remove the protective sheath over the IV port on plastic fluid bag. (Fig. 7)
5. Remove protective cap from the IV line spike **without touching the spike**. (Fig. 8)
6. Insert spike into port on the fluid bag. Force in as far as possible. (Fig. 9)
7. Hang fluid bag as high as possible above the level of your pet (a coat hanger on a door works well).
8. Compress the drip chamber and release, allowing it to fill 1/3 to 2/3 full. (Fig. 10)
9. Open the pinch clamp or roll the roller clamp and allow a small amount of fluids to flow from the IV line; then, **close** the pinch clamp or return the roller to the **off** position. This will clear any air from the line.
10. Grasp the MicroClave firmly, remove **red or blue port cap** (if used), and drop it in a bowl or cup containing **approved disinfectant**. Be careful not to unscrew the MicroClave when removing the port cap. (See Fig. 11)
11. Take a gauze pad or cotton ball and soak it with the disinfectant, and clean the opening of the MicroClave. **ALLOW 1-MINUTE CONTACT TIME ON THE MICROCLAVE!**
12. Remove the cap from the end of the IV line. Drop the cap into recommended disinfectant.
13. Insert IV line into the MicroClave connector and **twist ¼ turn while pushing in**. Twist **luer lock** to secure connection. (Fig. 2)
14. Turn on fluid by opening pinch or roller clamp to administer fluid dose prescribed by veterinarian.
15. Turn off fluid flow and unplug the IV line from the MicroClave connector, by unscrewing the IV line luer connector from the MicroClave.
16. **If reusing the IV line within 12 hours**, recap the IV line with the IV line cap that has been in the disinfectant solution; **otherwise, dispose of the fluid bag and IV line.**
17. Wipe the MicroClave again with the disinfectant using a cotton ball or gauze pad.
18. Replace the red or blue port cap that has been soaking in the disinfectant. **DO NOT RINSE THE DISINFECTANT OFF OF THE CAP.**
OPTIONAL: Place 1 drop of antibiotic or enzymatic solution, (if provided by your veterinarian), under the skirt onto the location where the tube penetrates the skin for the first 1-2 weeks.



Fig. 5

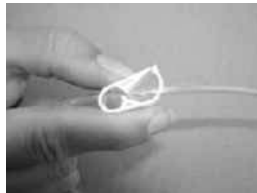


Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10



Fig. 11



Fig. 12

Changing the MicroClave

PractiVet recommends changing the MicroClave every **10 uses or every 14 days** (whichever comes first.) If you have the **GIF-Tube Client Kit**, all of the supplies needed to change the MicroClave are in your kit. If you **DO NOT** have the **GIF-Tube Client Kit**, talk with your Veterinarian about changing your pet's MicroClave.

To change the MicroClave:

1. Wash and Disinfect hands thoroughly.
2. Open the package containing the new MicroClave and port cap (**red or blue**). Place the cap in the recommended disinfectant. Remove drape from your **GIF-Tube Client Kit** and place the hole over the MicroClave that is already on your pet.
3. Unscrew the blue MicroClave from the white GIF-Tube hub (See **Fig. 2 & Fig. 11**) by turning it in a counter-clockwise direction. **Hold the white hub in place when unscrewing the MicroClave to prevent loosening of the hub within the tube.** (See **Fig. 12**)
4. Disinfect and clean the white GIF-Tube hub with a cotton ball or gauze soaked in the recommended disinfectant.
5. Remove the protective sheath from the **clear hub** of the new MicroClave **without touching the end.**
6. Screw the new MicroClave clockwise securely onto the tube, while grasping the white hub to prevent it from rotating within the GIF-Tube. (See **Fig. 12**)
7. Place **red or blue port cap** (if used) onto MicroClave.

Frequently Asked Questions

What should I expect when I administer fluids?

The fluids should flow rapidly, and it should take less than 2-3 minutes per 100 ml of fluids. The fluids should accumulate in the tissues in the flank area of a cat, or in the area where the tube terminates in larger pets. If the fluids are warmed, the pet should not object strenuously to receiving the fluids. For the first week or two, a small amount of fluid may drip out from under the GIF-Tube skirt. By the time your pet is due the next treatment, all fluids from the previous treatment should be absorbed.

Occasionally, you will feel the sensation of bubbles when touching the area where the fluids accumulate. This is not serious, but can be prevented by being certain all air is out of the IV line prior to connecting to the MicroClave.

When should I suspect something is wrong and contact my veterinarian?

You should contact your veterinarian if:

1. The fluid flow rate has decreased from the previous days of treatment. Even an increase of 10 to 20 seconds per 100mls, is an indication of possible contamination.
2. Your pet experiences pain over the tube site or when you administer fluids
3. Leaking from under the skirt **after the first 2 weeks**
4. Blood or pus is observed in the area of the skirt
5. Fluids form in a tight pocket that resembles a sausage along the length of the tube
6. Loss of appetite or unusual hiding
7. Sudden preoccupation with the tube
8. Any stitches are broken or the skirt is torn

What is the most common cause of failure of the GIF-Tube?

The most common cause of failure is a low-grade infection. This infection causes the body to wall off the tube. Once walled off, the fluids can no longer quickly dissipate into the surrounding tissues, and tight pockets are formed. We refer to this as **“sausaging”**. Once an infection occurs, it is very unlikely that this sausaging will be reversed even if the infection is eliminated. We have found that if the infection is diagnosed and treated when the fluids first begin to slow down, but before severe sausaging occurs, many tubes can remain functional for long periods of time. Your veterinarian can use a **“flush test”** and culture to diagnose infection. **Your veterinarian can contact PractiVet technical support at (800) 641-8988 for the latest recommendations for treatment.**

If my pet's tube is removed, can a new one be placed?

Your veterinarian must wait a minimum of one week before replacing a GIF-Tube that has been removed for any reason. During this period, your pet will be treated with antibiotics to prevent an infection in the next tube.

If my pet's tube fails, does this mean that he is not a candidate for this procedure?

Absolutely not! We have had many patients where the second tube lasted over a year while the first began sausageing after a month or two. Other patients had 4 or 5 tubes over a 2-3 year period. However, it is important for you and your veterinarian to review all of the recommendations before placing a second tube.

If fluid flow decreases, what else could the problem be besides an infection?

Always check to see that the IV line is secured tightly to the MicroClave. On occasion, tightening the IV connection to the MicroClave will restore a rapid flow. You should also check to see that your IV fluid bag is held as high above the patient as possible, as this will increase the flow. **Do not allow the pet to lie on the side where the GIF-Tube is located during fluid administration. Also check for a kink in the IV line.**

How long can the tube remain in place?

The tube can remain as long as it is functioning properly. We have had many GIF-Tubes remain fully functional for over one year. **There is no need to remove a tube that is still functioning properly.**

How often should I see my veterinarian?

Your veterinarian will determine this based upon your pet's condition. We recommend that you see your veterinarian when it is time for your **first MicroClave change (usually around 10 days post implant)** so he can demonstrate the procedure for you. After this, we recommend a **monthly flush test** to catch any early signs of problems. At this time, he will most likely evaluate your pet's lab values.

What's included in the GIF-Tube Client Kit?

The **GIF-Tube Client Kit** contains **30 IV lines** specially designed to be economical and to work properly with the MicroClave. It also contains **3 MicroClaves** for changes every 10 treatments, and a **specially designed drape** to facilitate sterile MicroClave changes. A **forceps** is also provided for handling the cap that is dropped into the disinfectant solution. Your veterinarian can order this kit for you from his veterinary supplier. **Item #SFM6800**

If my pet is receiving fluid twice daily, what changes are necessary in the procedure previously described?

In large dogs, it is frequently necessary to divide the fluid dosage into two daily treatments. If your pet must receive twice daily fluid, it may be necessary to re-use fluids that were opened earlier that day. Below is a list of recommendations if this is the procedure you are following.

1. When you remove the cap from the IV line, drop it into the disinfectant solution to keep it sterile.
2. As soon as you remove the IV line from the MicroClave, replace the cap.
3. Place the bag of fluids with the IV line attached into a clean, covered bowl and place in the refrigerator.
4. To warm the fluid prior to the next administration, place 1/3 of the bag (**the part without the IV line**) in a bowl in the sink. Hang the IV line from a cup hook or cabinet door to keep it clear of the water. Run hot water into the bowl and let it overflow into the sink. **Do not heat over body temperature.** The bag should just feel slightly warm when held against your skin. **DO NOT ADMINISTER FLUIDS THAT HAVE BEEN OPEN FOR MORE THAN 12 HOURS EVEN IF REFRIGERATED!**
5. **Caution! Microwave will melt an IV line.**

Can I use needles with the MicroClave?

Absolutely not! Using needles with the MicroClave will ruin the integrity of the silicone.

Visit our website at www.practivet.com and our GIF-Tube client website at www.hoochcrf.com

Talk with other GIF-Tube users at the CRF GIF-Tube Users forum:

<http://groups.yahoo.com/group/giftube/>

For technical support contact PractiVet: (800) 535-4057 or Email: info@practivet.com