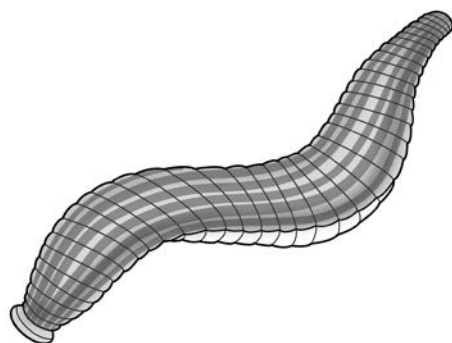


## Medicinal Leech Therapy

The use of this handout is to explain what leeches are, how they can help you, and what to expect during “leech therapy.” Although this may seem like a very old treatment, strong scientific evidence supports the use of leeches for microvascular surgery (surgery to repair tiny veins and arteries).

### What are leeches?

Leeches are spineless, worm-like creatures that live in water. Leeches look like fat black worms. They range in size from ½ inch to 2 inches. Medicinal leeches are “grown” in a sterile environment in the hospital. There is very small chance of the leeches giving you any type of infection. Even so, you may be given an antibiotic to prevent this.



### How can leeches help me?

After surgery, “fresh blood” (arterial blood), rich with oxygen from your lungs, goes to the surgical area (finger replant or flap). However, the “used blood” (venous blood) has trouble leaving the area and getting back to your heart and lungs. This causes the area to become blue or purple and cold. Leeches are attached to the discolored, cool area. They suck out the used blood and allow

more fresh blood to come and help keep the area healthy. Veins are more fragile and take longer to heal than arteries. Leeches take over the job of your veins. This helps give your veins time to heal.

Leeches produce a blood-thinner. The blood-thinner will cause the area to ooze blood for up to 48 hours after the leech is done feeding. This effect is helpful. Leeches also produce an anesthetic when they bite. This will numb the area being treated.

### What can I expect during leech therapy?

Your nurse will bring in a small plastic container filled with water and several leeches. Using long tweezers and rubber gloves, your nurse will pick out one leech and put it on the area chosen by your doctor.

Leeches can be “finicky” so your nurse may have some trouble getting the leech to attach to the right area. A drop of sugar water on the spot sometimes helps the leech to attach. Sometimes a needle poke of the area is needed to supply a fresh drop of blood for the leech to begin sucking. The needle poke rarely hurts as your nerves are just starting to heal and feeling is quite limited during this healing time. Your doctors may also poke the area to check blood flow. The placement of the leech will not hurt. Leeches squirt a numbing agent and you will not feel very much.

Leeches most often feed for at least 10 minutes and sometimes up to 60 minutes. Each leech will suck about 1-2 teaspoons of blood. Although leeches suck only a small amount of blood, the blood thinner they

secrete during the bite will cause blood to ooze for 24-48 hours. Your blood will be drawn to check your blood count at least twice a day to make sure it is not getting too low. Sometimes, patients may need a blood transfusion. Your doctor will decide this.

When done feeding, the leeches will fall off. Please alert staff when this happens. Your nurse will be checking on you often, but may not be in the room when the leech falls off. Leeches should never be pulled off. The leech is put into a container of alcohol and dies. Leeches are **never** reused.

Your room will be kept quite warm, at least 78°. Warmth will help blood flow to the affected area. Proper body positions will also help blood flow. Your nurse will help you find a comfortable position.

Please feel free to ask your nurse or doctor any other questions you may have. We are always happy to answer questions!

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright ©3/2018. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#5388.