**Application of Compression Hose**

**Definition of Terms**

**Compression** - to squeeze; to place a device on the leg to squeeze the muscle against the veins in order to increase circulation and prevent blood clots, phlebitis, edema.

**Compression hosiery** – knee high elastic socks worn on the leg to compress the tissues in the leg to promote upward movement of blood through the veins.

**Deep Vein Thrombosis (DVT)** – Blood clot found in the deep veins in the lower legs.

**Edema** – Swelling from fluid collecting in an area. Most often found in the hands, lower legs and feet.

**Lymphedema** – Faulty draining of fluids into the tissues due to inability of the lymphatic system to drain excess fluids from the tissues.

**Lymphatic System** – A network of tissues and organs that help rid the body of toxins, waste, and other unwanted materials.

**Pitting edema** – A significant collection of fluid in a body area that can be seen as a temporary impression in the skin that stays after pressure has been applied.

**Spider veins** – Visible capillaries just beneath the skin.

**Phlebitis** – Inflammation of the walls of a vein.
(Definition of Terms cont.)

**Thrombosis** – Blood clot in a vein or an artery.

**Thromboembolism** – A blood clot that has detached from the wall of a blood vessel and travels through the circulatory system. It can lodge in any vessel in the body.

**Valve** – A mechanism in a blood vessel that allows for fluid/blood to travel through the circulatory system. Valves in the veins allow for blood and other fluids to flow upward toward the heart. As fluid is pushed upward by the massaging action of the muscles squeezing the vessel (veins), valves in the veins close to keep blood from flowing backward and collecting in the tissues.

**Veins** – system of branching vessels or tubes that carry oxygen-depleted blood from various parts of the body back to the heart and lungs to get more oxygen.

**Venous insufficiency** – Failure of the veins to adequately circulate blood, especially from the lower limbs.

**Varicose veins** – Veins that have become enlarged and twisted
Application of Compression Hose

What are compression hose (TED® hose) and what do they do?
Compression hose are a special kind of prescribed elastic leg wear designed to squeeze the legs to help move blood upward. This prevents swelling. Knee-high compression hose are tightest at the ankles, becoming less tight toward the knees.

Why are compression hose worn?
They may be prescribed if a person has a condition that causes poor blood flow to and from their legs.

When are compression hose worn?
People who are bed-bound might wear compression hose. However, compression hose are generally worn when the individual is up and about. They are applied first thing in the morning, preferably before the person gets out of bed, before fluid has had a chance to accumulate in the tissues. If the person has been up already, have the person lay down for 15 minutes with leg(s) raised before applying the compression hose.

How often should compression hose be laundered?
Hand wash daily. Do not place in a dryer. Follow manufacturer’s instructions for care. Most people have 2 pair of compression hose so that while one pair is drying, the other is available for use. Do NOT put wet or damp hose on a person.

Why are compression hose so hard to get on?
They are made to fit the affected leg(s) snugly. If the hose are too loose, they cannot apply the pressure needed to squeeze the leg muscles enough. Do not put the hose on wet skin. The hose will go on easier if the person is laying down with their legs raised. Special devices are available to assist the person to put on their compression hose.

What are the potential problems associated with wearing compression hose?
If improperly applied, compression hose can cause tissue damage, circulation problems, worsen edema, or cause a superficial clot to travel. If compression hose are too small, they can cut off blood flow in the legs. If someone gains or loses a substantial amount of weight, the person needs to be remeasured and refitted for compression hose.

Compression hose should never be used if the person has any wounds on the leg, skin infection, lack of feeling in the limb, or is unable to get out of the bed and move around. Notify the appropriate health care professional if the person cannot wear the hose as prescribed.

Never fold the top of the hose down. This will cause harm to the person’s circulation.
Procedure for Application of Compression Hose

1. Wash your hands
2. Have person recline on bed
3. Be sure feet and legs are clean and dry
4. Place your hand in top of clean hose
5. Pull hose up your arm until your hand is in the foot of the hose
6. Roll hose inside out, down over your arm to your hand while keeping a grip on the inside of the toe
7. Grasp edges of hose and place person's foot into toe of hose
8. Work the foot of the hose over the person's foot. Be sure the toe and heel are in place
9. Smooth material over foot. Ensure there are no ridges or bunching
10. Grasp edge of hose and pull it up over the ankle and calf
11. If knee-length, be sure hose top is 1-2 inches below the crease at the back of the knee; NEVER roll the top of the hose down
12. If thigh length, pull the hose over the knee and over the thigh until it is 1-3 inches below the buttocks; NEVER roll the top of the hose down
13. Be sure the hose fits smoothly over the skin; has NO wrinkles or folds; if there are wrinkles or folds, roll the sock back to below the wrinkle and re-work the sock back up the leg
14. Wash your hands
15. Document on the MAR/TAR
Checklist for Application of Compression Hose

_____ 1. Wash hands.
_____ 2. Check MAR / TAR for current order.
_____ 3. Note any special instructions on the MAR / TAR.
_____ 4. Gather the equipment you need. Make sure the hose are dry.
_____ 5. Have person recline on bed and explain the procedure.
_____ 6. Be sure feet and legs are clean and dry and there are no open sores, skin infections or other signs the hose should not be applied. Put on gloves if person has toe fungus.
_____ 7. Place your hand in the top of clean hose.
_____ 8. Pull hose up your arm until your hand is in the foot of the hose.
_____ 9. Roll hose inside out down over your arm to your hand while keeping a grip on the inside of the toe.
_____ 10. Grasp edges of hose and place person’s foot into toe of hose.
_____ 11. Work the foot of the hose over the person’s foot. Be sure the toe and heel of hose is in place.
_____ 12. Smooth material over foot. Ensure there are no ridges or bunching.
_____ 13. Grasp edge of hose and pull it up over the ankle and calf.
_____ 14. Be sure the hose top is 1-2 inches below the crease behind the knee or 1-3 inches below the buttocks.
_____ 15. Be sure the hose fits smoothly over the skin. No wrinkles or folds. If there are wrinkles or folds, roll the hose back to below the wrinkle and re-work the hose back up the leg.
_____ 16. Repeat procedure for opposite leg if the hose are ordered for both legs.
_____ 17. Wash your hands.
_____ 18. Document on the MAR/TAR.
_____ 19. Report any problems to appropriate Health Care Professional.

Trainee name: ____________________________________ Date: ______________
______ Instructor initials            Instructor Name____________________________

Comments: