



AMERICAN COLLEGE OF SURGEONS DIVISION OF EDUCATION

Blended Surgical Education and Training for Life®

# SURGICAL PATIENT EDUCATION PROGRAM

Prepare for the Best Recovery

## Welcome

You are an important member of your health care team. This wound home skills kit provides information and skill instruction for the care of venous leg ulcers and lymphedema. The American College of Surgeons Wound Management Home Skills Program was developed by members of your health care team: surgeons, nurses, wound care specialists, and patients. It will help you learn and practice the skills you need to take care of slow healing venous ulcers or Lymphedema, watch for improvements, and how to prevent other ulcers.

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## **Venous Leg Ulcers**

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## Venous Leg Ulcers

A venous leg ulcer is an open wound between the knee and the ankle caused by problems with blood flow in the veins. Blood is carried down to the legs by arteries and back to the heart from the legs by veins. Veins have valves that keep the blood from backing up. When the vein valves don't open and close correctly or the muscles are weak, blood backs up in the veins and causes swelling (edema) in the lower legs.



### **Risk Factors for Venous Ulcers<sup>2</sup>**

- Having a previous injury or surgery to your legs
- Having a clot deep in a vein in your leg (deep vein thrombosis or DVT)
- Having a family history of vein problems
- Being older
- Being a smoker or having been a smoker
- Being overweight
- Not being physically active
- Standing at your job for long hours

## Signs of a Venous Ulcer

- Venous ulcers appear on the surface of your skin—on the inner bony point of your ankle, calf, or inside of your lower leg
- They are shallow and irregularly shaped with pain and swelling (edema)
- You may feel an ache, heaviness, pain, or tiredness in your leg and itching
- You may also have arterial ulcers, but these are treated differently from venous ulcers.



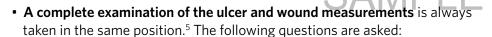
## What to Do if You Develop a Venous Leg Ulcer

- Keep the ulcer clean and see your health care provider as soon as possible.
- Do not wear tight clothing, and protect your ulcer from injury.
- Stop smoking if you are a smoker. The chemicals in cigarettes interfere with blood flow and skin healing. For help, you can view The American College of Surgeons Quit Smoking brochure and Quit Plan online at facs.org/quitsmoking.
- Your health care provider will remove any debris or dead tissue, apply a non-stick bandage over your wound, and apply a compression bandage or compression stockings to improve circulation.

### **Tests and Exams**

Your tests and exams may include:

- **Complete physical exam:** includes checking circulation (blood flow), sensation (feeling) and leg pain while moving (claudication)
- Review of all medications, illnesses, or conditions; allergies to drugs and dressings; and reactions to anesthesia
- Vascular (blood vessel) assessment may include:
  - Finding out if you have both venous and arterial disease in order to heal the wound<sup>3</sup>
  - **Doppler study:** Uses a handheld wand to hear the sound of blood flowing through the blood vessels.
  - Ankle-brachial index (ABI) or toe pressure: Compares the blood pressure at your ankle to the blood pressure in your upper arm.<sup>4</sup> The test is just like having your blood pressure checked in your arm. A blood pressure cuff is placed on your thigh, calf, foot, and toes. You may feel a little pressure for only about 60 seconds for each measurement. Lower blood pressure in the leg (an ABI less than 0.9) may indicate a narrowing or blockage in the arteries in your legs (peripheral artery disease or PAD).
- Laboratory tests and x-rays as needed



- Where is your wound located?
- What is the size and depth?
- What is the color/status of the wound?
  - Black: death of cells in tissue (necrosis)?
  - Yellow, red, or pink?
- Is there a foul odor or drainage?
- What is the condition of the skin around the wound? (periwound condition)
- Review of your diet, nutrition, and fluid intake (see Nutrition on page 8)



#### **Keeping You Informed**

Venous ulcers take time to heal, but over 90% of venous ulcers do heal in one year.<sup>6</sup>

Wound cleaning is key to healing. The evidence shows that infection rates are the same whether you clean with tap water or normal saline. Debridement is suggested, but no method of debridement is better than another.

Compression therapy promotes healing and is the first-line treatment for venous leg ulcers. Two-layer stockings have similar healing results as four-layer bandaging but may be less bulky and easier to apply for some patients.<sup>7</sup>



## **Nutrition**

Eating right can help. You can use this form to find out if you are eating a healthy diet: mna-elderly.com/forms/Self\_MNA\_English\_Imperial.pdf.

#### What to Eat

A healthy diet can also promote wound healing and should include:8

- Protein and iron—important for tissue repair and can be found in meats, poultry, eggs, fish, and nuts
- Some meatless sources of protein, including:
  - Beans
  - Quinoa—a grain substitute for rice
  - Soy—a vegetarian option that often comes in the form of tofu
  - **Peanut butter**—also provides healthy fats and essential amino acids
  - Buckwheat—can be ground into flour and also eaten as oatmeal
- Calcium—dairy products and leafy greens are high in calcium
- Vitamins A, C, E, and K—important for skin repair and can be found in lean meats, fruits, vegetables, dairy, and whole grains
- Drinking 8 cups of water or other beverages each day—it is important to make sure you're getting enough fluids

### **How Much to Eat**

A healthy diet should include 30 to 35 calories (energy intake) for every kilogram (kg) of your body weight. You can find out how many calories you need each day by using the calculation tool below.

### **Daily Calorie Calculation Tool**

Your Weight	
Divide by 2.2	
Multiply by 30	
Total	

### Example

$$\frac{150 \text{ lbs.}}{2.2}$$
 = 68 kg x 30 cal. = 2,040 calories/day

Weigh yourself daily and adjust your calories if you gain or lose weight. Your health care provider can request that you have a consult with a dietitian if you have difficulty managing your weight, eating, have dietary restrictions, or have any medical conditions with special diets.

## **Pain Control**

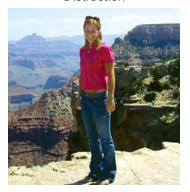
Venous leg ulcers may be very painful. Below is a list of pain control options.

## **Non-Medication Strategies for Pain**

- Wear compression bandages or stockings as much as possible (see Dressings and Bandages on page 16).
- Stay as active as possible, and elevate your legs when seated.
- Position off your venous ulcer whenever possible.
- Keep your bed linens smooth and unwrinkled.
- Request a time out or rest period during your wound care or any procedure that causes pain.
- Keep your ulcer covered and moist, and use a non-stick dressing.
- Distraction (music or games) and guided imagery can direct your focus away from your pain.<sup>9</sup>



Distraction



Guided imagery

### **Medication for Mild-to-Moderate Pain**

- Nonsteroidal anti-inflammatory drugs (NSAIDs) such as aspirin, ibuprofen (Motrin®, Advil®), and naproxen (Aleve®) are used to treat mild-to-moderate pain.
- Plan to take your pain medication 30 minutes before your wound care.
- Possible side effects include stomach upset, bleeding in the digestive tract, and fluid retention.



### **Medication for Nerve Pain**

- Medications such as gabapentin (Neurontin®) and pregabalin (Lyrica®) are used to prevent nerve pain by calming over-active nerves.
- Possible side effects include dizziness, drowsiness, suicidal thoughts, and swelling in your hands and feet.

## **Narcotics or Opioids for Severe Pain**

- Severe pain means you can't focus or sleep because you can't take your mind off your pain.
- Examples include tapentadol (Nucynta®), tramadol (Ultram®), hydrocodone (Norco®, Vicodin®, Lorcet®), oxycodone (OxyContin®), and oxycodone with acetaminophen (Percocet®, Percodan®).
- Side effects include sleepiness; lowered blood pressure, heart, and breathing rates; skin rash and itching; nausea; constipation; and difficulty urinating. You may also become physically dependent or addicted to opioids.
- If you have pain lasting for several weeks or longer, a treatment plan will be developed to help ensure best pain management practices.

## **Pain Management Guide**

#### **How Intense Is My Pain?**

- I hardly notice my pain, and it does not interfere with my activities.
- I notice my pain and it distracts me, but I can still do activities (sitting up, walking, standing).
- My pain is hard to ignore and is more noticeable even when I rest.
- My pain interferes with my usual activities.
- I am focused on my pain, and I am not doing my daily activities.
- I am groaning in pain, and I cannot sleep. I am unable to do anything.
- My pain is as bad as it could be, and nothing else matters.

#### What Can I Take to Feel Better?

#### Non-medication therapies

#### Non-opioid, oral medications

You may take these to control mild-tomoderate pain when needed

#### Non-medication therapies

#### **Non-opioid medications**

You may be told to take them regularly throughout the day rather than as needed

#### Non-medication therapies

Around-the-clock non-opioid medications

**Short-acting opioids** (for a few days)
Call your surgeon if your pain continues



## 

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## **Wound Cleaning**

This chapter will include instructions on cleaning your wound, types of dressings and bandages, removing a dressing, and putting on a new dressing.

- Most wounds should be cleaned at least once each day. Follow the
  instructions of your wound care provider. Some dressings are designed
  to stay in place for 2 to 3 days. Clean all of your skin in the shower daily if
  allowed by your health care provider.
- A bandage or dressing should be applied if the wound is draining or needs protection.
- Your health care provider will determine if dead tissue on your wound should be removed. This is called debridement. Your health care provider can do a debridement with special tools or use medications or bandages placed on the wound.
- You should not try to debride your wound, as you can cause harm and make the wound larger.

## **Goals of Cleaning**

- Remove unhealthy tissue and bacteria from the the surface of your wound
- Inspect your wound
- Protect your healing wound

## **Cleaning Your Wound Skills**



- These are general instructions for cleaning your wound. Follow any special instructions you may also receive from your health care provider for cleaning your wound.
- Watch the Cleaning Your Wound video online at facs.org/woundcare, and then follow each of the steps.

#### SKILL

#### **Gathering Your Supplies**

- Drinking (tap) water or normal saline 0.9%
- A mild cleansing solution, if advised, such as Dove® or Ivory®<sup>10</sup>
- Clean gloves
- A clean bowl
- Dressing material
- Tape or a bandage
- Clean gauze or a clean towel
- Scissors



#### **SKILL**

### **Preparing Your Work Area**

- Clean the area where you will set out your supplies.
- If your hands are visibly dirty, wash your hands with soap and water for 15 to 30 seconds. If your hands are not visibly dirty, you may use a 60% alcohol-based hand gel.



- Put a clean towel over your work area and set a clean bowl on it.
- Pour water or saline into the bowl.
- Place gauze or a clean towel and dressing materials on the work area.



### SKILL Removing Your Old Dressing

- If the dressing is dry or stuck to your wound, moisten it with normal saline to loosen it before removing.
- Loosen the tape on the dressing but don't remove the dressing yet.
- Put on a medical glove or use a plastic bag over your hand to grasp and remove the dressing.
- Examine the color and amount of the drainage.
- Place the dressing and the glove/bag in a second sealed plastic bag and discard.



Moisten your wound with saline to remove all pieces of an old dressing

#### SKILL

#### **Cleaning Your Wound**

- Use a 60% alcohol-based hand gel to clean your hands again.
- Put on clean gloves.
- Soak the gauze or clean towel with water or saline and apply a topical antiseptic cleanser, if advised.<sup>11</sup>
- Starting at the center of the wound, work in a circular pattern and clean toward the edges. Do not return to the wound center after cleansing to avoid recontamination of the wound.



- Remove any loose tissue with the gauze pad.
- Do not press hard or scrub a clean wound because this can damage the tissue and slow healing.<sup>12</sup>
- Wet a new gauze or towel to rinse off the disinfectant. Start at the center and work out to the edges.
- Use a new gauze or towel and a mild skin cleanser and water to clean periwound maceration (skin around the wound broken down by moisture).<sup>13</sup>
- Use a dry gauze or towel to pat gently around the wound to dry completely.

### Warning: Use these products only if advised by your health care provider:14

- Hydrogen peroxide can be harmful to tissues even at low concentrations.<sup>15</sup>
- lodine products should be used with caution if you have renal (kidney) failure, history of thyroid disorders, or known iodine sensitivity.
- Sodium hypochlorite (Dakin's solution) may be harmful to cells at all concentrations. A solution labeled no greater than 0.025% may be advised for short periods only when no other option is available.



## **Dressings and Bandages**

The main treatments for venous leg ulcers are:

- 1. Professional debridement of your wound
- 2. Treatment of any infection
- 3. Controlling moisture in and around your wound
- 4. Compression bandages or stockings

The correct dressing depends on the type, stage, and size of your wound and your health condition. As your wound heals, you may need to change to a different type of dressing. If you have complications, your health care provider can help you choose the right dressing.

## **Gauze Dressings**

- Do not use dry gauze directly over open wounds. It can dry and stick to the wound and cause pain and damage when removed.
- Use a single gauze strip/roll to pack deep ulcers and wound spaces. Small single pieces can grow into the wound edge and become infected if not properly removed.
- Gauze dressings may be used as the secondary (cover) dressing over a moist primary dressing.
- Loosely woven gauze may be packed into deep or highly draining ulcers.
- **Tightly woven gauze** is used for minimally draining ulcers.



Loosely woven gauze



Tightly woven gauze

## **Dressings for Your Wound Type**<sup>16</sup>

Your Ulcer	Goal	Dressing Type	Considerations/Precautions
Clean and red     Dry-to-low     drainage	Keep your skin moist with lotion     Promote healthy tissue growth	Hydrogel     Silicone foam	Avoid bandages and tape that cause occlusion, maceration (skin breakdown), or allergies
<ul> <li>Red and pink with new tissue growth</li> <li>No-to-low drainage</li> </ul>	<ul> <li>Keep your skin moist with lotion</li> <li>Protect new tissue growth and wound contraction</li> </ul>	<ul><li>Hydrogel</li><li>Hydrocolloid</li><li>Transparent film</li><li>Silicone foam</li></ul>	<ul> <li>Use thin dressings that won't stick to or tear the wound when removed</li> <li>Avoid bandages and tape that cause occlusion, maceration (skin breakdown), or allergies</li> </ul>
Clean and red     Moderate-to- high drainage	<ul> <li>Keep your skin moist with lotion</li> <li>Promote healthy tissue growth</li> <li>Manage drainage</li> </ul>	<ul> <li>Alginate</li> <li>Foam</li> <li>Silicone</li> <li>Manuka honey<sup>17</sup></li> </ul>	<ul> <li>Use an absorbent dressing</li> <li>Avoid bandages and tape that cause occlusion, maceration (skin breakdown), or allergies</li> <li>Be sure to remove all foam pieces during dressing changes</li> </ul>
<ul><li>Mixed yellow and red</li><li>Infected</li><li>Low-to-high drainage</li></ul>	<ul><li>Reduce bacteria</li><li>Manage drainage</li><li>Control odor</li></ul>	<ul> <li>Alginate</li> <li>Silver</li> <li>Foam</li> <li>Manuka honey</li> <li>Iodine hydrocolloid</li> <li>Hydrogel</li> <li>Hydrofiber</li> </ul>	<ul> <li>Improve healing of chronic clinically infected venous ulcers</li> <li>Use an absorbent dressing</li> <li>Avoid bandages and tape that cause occlusion, maceration (skin breakdown), or allergies</li> <li>Be sure to remove all foam pieces during dressing changes</li> </ul>
Slough (dead separating tissue)     Yellow	Remove slough     Keep your wound moist     Manage drainage	<ul><li>Alginate</li><li>Manuka honey</li><li>Hydrocolloid</li><li>Hydrogel</li><li>Hydrofiber</li></ul>	<ul> <li>Use a dressing that helps remove the slough and absorbs drainage</li> <li>Avoid bandages and tape that cause occlusion, maceration (skin breakdown), or allergies</li> <li>Be sure to remove all foam pieces during dressing changes</li> </ul>
<ul> <li>Slough (dead separating tissue)</li> <li>Brown, black, or grey</li> <li>Dry-to-low drainage</li> </ul>	Remove slough     Keep your wound moist	<ul><li>Alginate</li><li>Manuka honey</li><li>Iodine hydrocolloid</li><li>Hydrogel</li><li>Hydrofiber</li></ul>	<ul> <li>Cover with transparent film or silicone dressing</li> <li>Avoid bandages and tape that cause occlusion, maceration (skin breakdown), or allergies</li> </ul>
Necrotic and black	Professionally debride	lodine paint (unless not recommended)	<ul><li>Cover iodine with a gauze dressing</li><li>Avoid occlusive dressing</li></ul>

## **Dressing Skills**





- Your health care provider may advise or prescribe a specific type
  of dressing for you to use. The chart on the previous page and
  the online video will help you understand the different types of
  dressings used for different wound conditions. If your wound is not
  healing, you may want to consult a wound care specialist.
- Watch the Dressings and Bandaging video online at facs.org/woundcare, and then follow each of the steps.

#### **SKILL**

#### **Gathering Your Supplies**

- Drinking (tap) water or normal saline 0.9%
- Clean gloves
- A clean bowl
- Scissors
- Tweezers
- A clean towel
- Outer dressing material to use as a bandage
- Tape
- Cotton swabs (Q-tips®)
- A small plastic bag
- Alcohol wipes





#### **SKILL**

#### **Preparing Your Work Area**

- If your hands are visibly dirty, wash your hands with soap and water for 15 to 30 seconds. If your hands are not visibly dirty, you may use a 60% alcohol-based hand gel.
- Put a clean towel over your work area and set a clean bowl on it.

- Pour water or saline into the bowl.
- Open any dressing packages so you can easily remove the contents later.
- Clean tweezers and scissors with alcohol or an alcohol wipe before using.

#### **SKILL**

### **Putting On a New Dressing**

- Apply a moist dressing over a clean wound.
   It is the first layer that absorbs drainage from the wound.
- Wrap a secondary gauze bandage 1 inch past the dressing in all directions to make sure it is completely covered.
- Tape the dressing. Tape the end of the bandage to the bandage itself to hold it in place without tearing the skin.







## **Compression Bandages and Stockings**

It is important to wear your compression bandage or elastic compression stockings every day. A compression bandage is used initially over the primary dressing to help improve blood flow and decrease swelling. Your health care provider will let you know if you should continue to use a compression bandage or change to compression stockings.





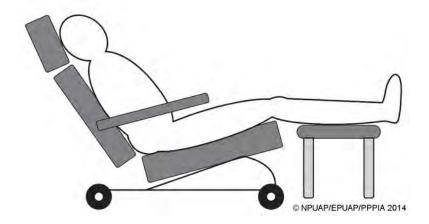


Compression stockings

When a compression bandage or compression stockings are first applied over venous ulcers, it is usually painful. You may need to take pain medication as advised by your health care provider. The pain should lessen once the ulcer starts to heal, but this can take up to 10 to 12 days. The pain level needs to be evaluated and appropriate pain management should be available.

- Elastic compression support stockings may be made in two, three, or four different layers. The four-layer system may result in faster healing. Some are changed daily and others can stay on for up to a week. Your health care provider will tell you what type of compression is best for you.
- If the compression bandage feels too tight and is uncomfortable in bed at night, get up for a short walk or elevate your legs with a sofa cushion or foam edge.
- Keep as active as possible and continue with your normal activities.
   Regular exercise, such as taking a walk each day, will help reduce leg swelling.
- Avoid sitting or standing still with your feet down for longer than 10 minutes at a time.

- Flex your ankles to pump your leg muscles and improve blood flow while seated.
- Remove or cut the bandage or stocking off immediately if you have numbness or tingling in your foot or leg; pain under the bandage; or your toes become white, blue, swollen, numb, or cold.
- Mark your calendar to remind yourself when it is time for new stockings.
- Keep your toes at the same level as your eye, to help ease swelling.



### **Unna's Boot**

SAMPLE

**Some patients may need more rigid compression.** This treatment is called Unna's boot, a low-compression gauze bandage containing 10% zinc oxide paste, gelatin, glycerin, and water.<sup>19</sup> The zinc oxide paste helps ease skin irritation and keeps ulcers and sores moist. The boot is used for patients who can actively move on their own.

The gauze is applied wet and will dry and become rigid. When dry, the boot gently compresses the calf muscle while walking, resulting in removal of excess fluid. It can be purchased in stores or made at home. It needs to be changed every three to seven days by a health care provider or a skilled family member.

The leg with the boot dressing will be wrapped about 2 inches behind the tip of the big toe, just before the foot starts to curve. As the gauze is wrapped, pleats or tucks are added to help the boot conform to the leg. A figure-eight pattern of wrapping may be used to apply the boot. The wrapping will stop about one inch below the knee.



Unna's boot

### **Additional Treatments**

- **Antibiotics** may be given for short periods if the skin and tissues around the ulcer become infected.
- Some people with venous leg ulcers develop rashes with scaly and itchy skin.
   Do not scratch your legs if they feel itchy because this damages the skin and may lead to further ulcers. Use a moisturizer or a mild corticosteroid cream or ointment. If any medications, creams, or dressings seem to cause itching, you may need to be tested for allergies.
- **Surgery** for varicose veins or other vein problems is advised in some cases. This may correct the pressure of blood pooling in the veins and allow an ulcer to heal.
- A skin graft may be advised for a large ulcer or for one that does not heal well.

Most venous ulcers improve in a few months with treatment and compression. If your ulcer is not healing, your health care provider may suggest:

- Electrical stimulation
- Medications
- Surgery



Debriding the ulcer

### **Once Your Ulcer Is Healed**



- You will need to wear compression stockings every day for the rest of your life.
- They should be put on first thing in the morning and removed at bedtime.
- This will help prevent the ulcer from coming back by controlling the swelling.
- You will need new stockings every 3 to 6 months as they wear out.
- Read the label—be sure to follow directions for washing and replacing stockings.





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## Lymphedema Ulcers

## **Causes of Lymphedema**

Lymphedema ulcers may be caused by damage to the lymphatic system or removal of lymph nodes, most commonly after surgery. The lymphatic system is a network of tissues and organs that helps the body get rid of toxins, waste, and other unwanted materials.

Other causes of lymphedema include:

 Radiation treatment for cancer, which can cause scarring and inflammation of your lymph nodes or lymph vessels



Venous ulcer and lymphedema

- Cancer cells, which can also block lymphatic vessels
- Infection

Ask if your radiation treatment will be aimed at lymph nodes, so you'll be aware of the possible risks.

## Signs of Lymphedema<sup>20</sup>

- Swelling of part or all of your arm or leg, including your fingers or toes
- A feeling of heaviness or tightness
- Limited movement
- Aching or discomfort
- Recurring infections
- Hardening and thickening of the skin (fibrosis)
- The ulcer appears foul and dirty

## **How to Treat Your Lymphedema**

- Keep the skin and wound clean and covered, if necessary.
- Your health care provider will remove any dead tissue (debridement).
- Clean and moisturize all your skin daily to prevent dryness.
- Wear compression bandages or stockings as advised by your health care provider.
- Keep your swollen limb elevated as much as possible.
- Light exercises moving the affected limb may encourage lymph fluid drainage.
- Use caution when walking. The extra weight from the increased fluid (edema) in your lower leg(s) can cause falls, injury, ulceration, and infection.
- Take all prescribed medications, including those for diabetes control.

## Ways to Reduce Your Risk of Lymphedema

- Limit the use of sharp objects by shaving with an electric razor, wearing gloves when you garden or cook, and using a thimble when you sew. Avoid having blood drawn or vaccinations in your affected limb.
- Maintain a healthy weight. Lymphedema is seen most often in obese patients.
- Exercise and stretching are encouraged after cancer treatment, but avoid heavy activity until you've recovered from surgery or radiation.
- Do not apply ice or heat (for example, a heating pad) to your affected limb. Protect your affected limb from extreme cold.
- Elevate your affected limb above the level of your heart as much as possible.
- Do not wear tight clothing that may constrict your arm or leg. Ask that your blood pressure be taken in your other arm.
- Inspect the skin on your arm or leg daily. Watch for changes or breaks in your skin that could lead to infection. Keep all of your skin clean and nails trimmed and do not go barefoot.

## Other Treatment Options for Lymphedema

- Your health care provider may also recommend manual lymphatic drainage (MLD). MLD is a gentle type of skin massage that helps lymph fluid drain out of a limb into an area that drains normally. MLD also increases blood flow in deep and superficial veins.
- Intermittent pneumatic compression (IPC) can be used with or without compression dressings.<sup>21</sup> An inflatable jacket (sleeve, glove, or boot) is applied around the limb. Pressure lines are connected between the jacket and the air pump.
- The pump fills the air chambers of the jacket, putting pressure against the limb and forcing fluids, such as blood and lymph, out of the pressurized area. The pressure is then reduced, allowing increased blood flow back into the limb. IPC can be used when compression stockings or bandages are not tolerated.



Intermittent pneumatic compression





## Home Care Planning

To make sure you are ready to go home, you and anyone helping with your care should review the **Skills Checklist** and the **Discharge Checklist** with your health care provider. They are included in the pocket at the back of this booklet. You should be able to explain and demonstrate all parts of your care before you go home.

Wound care supplies may be ordered through a local medical equipment store, pharmacy, or online. Have any supplies you need ordered before you leave the hospital. It may take 1 to 2 days for them to arrive. Leave the hospital with several days of wound supplies in case there is a delay.

You may need to have prescriptions filled for medication or wound dressings. If you will have home health care, they may be assigned to order your supplies. Your hospital discharge planner can help with the specific details for the coverage of the supplies you need.

At any point in your care, you can refer to this booklet to review your instructions as well as your checklists and the videos for skill instructions at *facs.org/woundcare*.

- Lacerations and Abrasions
- Cleaning Your Wound
- Packing Your Wound
- Dressings and Bandaging
- Your Surgical Drain
- Negative Pressure Wound Therapy

## Wound Care Resources

#### **Founding Organization**

American College of Surgeons Surgical Patient Education Program 800-621-4111 facs.org/patienteducation

#### **Collaborative Organizations**

American Burn Association ameriburn.org

American College of Surgeons Advisory Council for General Surgery, Advisory Council for Pediatric Surgery, and Advisory Council for Plastic and Maxillofacial Surgery facs.org

American College of Wound Healing and Tissue Repair acwound.org/patients.php

American Association for the Surgery of Trauma aast.org

American Society of Plastic Surgeons plasticsurgery.org

Association of periOperative Registered Nurses (AORN) aorn.org

Wound Healing Society woundheal.org

Wound, Ostomy and Continence Nurses Society™ (WOCN®) wocn.org

#### **Additional Resources**

Advanced Tissue

advancedtissue.com/the-best-and-worst-ideas-for-open-wounds

Association for the Advancement of Wound Care (AAWC) Wound Patient/Caregiver Resources aawconline.org/wound-patientcaregiver-resources

National Pressure Ulcer Advisory Panel (NPUAP) npuap.org

WOCN® Society™
Patient Information section
wocn.org/?page=PatientResources

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## Check Your Knowledge

### **Question 1**

All of these are true about the appearance of venous leg ulcers **except**:

- **A.** These ulcers are on the skin's surface.
- **B.** These ulcers are on the inner bony point of your ankle or calf, or on the inside of your lower leg.
- **C.** These ulcers usually appear above your knee on your thigh.
- **D.** These ulcers are shallow and irregularly shaped with pain and swelling (edema).

### **Question 2**

The most important part of treatment for venous leg ulcers is:

- **A.** Covering your ulcer with a dry gauze dressing.
- **B.** Staying as inactive as possible and not elevating your legs.
- **C.** Cleaning your venous leg ulcer with hydrogen peroxide.
- **D.** Wearing compression bandages or stockings as much as possible.

### **Question 3**

When your venous leg ulcer is healed, which of these are true?

- **A.** You need to wear compression stockings every day for the rest of your life.
- **B.** Compression stockings should be put on first thing in the morning and removed at bedtime.
- **C.** You will need new stockings every 3 to 6 months as they wear out.
- **D.** All of the above are true.

### **Question 4**

Management of lymphedema at home includes which of the following?

- **A.** Cleaning and moisturizing all of your skin daily to prevent dryness.
- **B.** Debriding (removing dead tissue) from your wound yourself with a sharp instrument.
- **C.** Keeping your swollen limb elevated as much as possible.
- **D.** Light exercises that move the affected limb to encourage lymph fluid drainage.

Answers: Question 1: C Question 2: D Question 3: D Question 4: A,C and D

## Disclaimer

The information contained in this booklet and the patient education section of the American College of Surgeons (ACS) website does not constitute medical advice. This information is published as a communications vehicle: to inform and to educate the public about specific surgical procedures. It is not intended to take the place of a discussion with a qualified surgeon who is familiar with your situation. It is important to remember that each individual is different, and the reasons and outcomes of any operation depend upon the patient's specific diagnosis, disease state or other medical condition.

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## **Evaluation Consent**

## Your Input Is Valuable

You and your family are important members of the health care team. In order to help you safely care for yourself or a family member or friend with a wound, you are being provided with the American College of Surgeons Venous Leg Ulcers and Lymphedema Home Skills Kit.

We would like you to help us make sure that this skill kit prepared you to provide the best care for yourself or someone with a wound.

We are asking you to complete a short evaluation about your care. You should complete this evaluation after your first follow-up visit with a health care provider or surgeon. This visit usually happens 7 to 14 days after your procedure.

If you choose to complete the evaluation, you have two easy options:

- Mail: Fill out the printed evaluation included in this program and mail it back in the enclosed envelope provided.
- Online: Visit our website, facs.org/woundcare. Look for the link to Complete the Wound Care Patient Evaluation: We Need Your Opinion!

### Some Information about the Evaluation:

- It will take about 5 minutes of your time.
- Answering this evaluation may help someone with a wound in the future.
- All answers will be seen only by the study investigator at the American College of Surgeons.
- Only the group response will be reported (for example, the average time patients spent watching the videos was 20 minutes).
- The group responses will help your surgical team know what else can be done to help you or someone else care for a wound after an injury or operation.
- You may check the evaluation website for the updated summary of the responses.

#### Any questions should be directed to:

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# SURGICAL PATIENT EDUCATION PROGRAM

Prepare for the Best Recovery

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100+*years*