PATIENT INFORMATION

Pin-Site Care



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DISCLAIMER

The information on this brochure is for educational purposes only and it is not a suitable substitute for a consultation with your physician or healthcare professional. The information provided herein is a service, and should only be viewed as opinion. The information contained herein has been obtained from sources deemed ethical and reliable but is not guaranteed as to accuracy or completeness.

ALWAYS SEEK THE ADVICE OF YOUR PHYSICIAN OR OTHER QUALIFIED HEALTH PROFESSIONALS.

What is External Fixation?

When a bone needs medical attention to correct a deformity or to treat a fracture, there are different treatment options a doctor will consider. Proper care of a broken bone should relieve pain and help ensure that the bone will heal correctly. Your surgeon has assessed your treatment needs and has decided that external fixation is the best treatment for you.

External fixation, just as the name suggests, is a device worn outside the body. This device, which is called a fixator, is connected to the bone with bone screws (commonly called pins). The pins pass through the skin, and sometimes muscles, to connect the external fixator to the bone. Two or more pins are placed on either side of the broken bone to hold the bone in place and to anchor the fixator securely. Sometimes wires are used with pins or instead of pins to secure the bone pieces.

Your surgeon uses the external fixator to place the broken bone in its correct position and alignment until bone healing occurs. This may take approximately six weeks for a simple fracture, and up to one year or longer for a more complicated procedure.

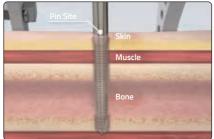
Why is the Pin Site important?

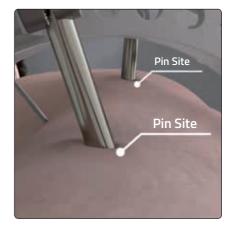
The area where the pin meets the skin is called the pin site. This opening, like any cut or nick in the skin, must be kept clean or there will be a risk of infection. Infection could cause the pin to loosen or require its removal. Using external fixation as a treatment to heal your fracture may help you return to your normal activities more quickly, but it is essential that you care for your pin sites correctly to help prevent infection and allow more comfortable healing. You will be advised while you are in the hospital how to clean your pin sites.

During your stay you will become increasingly involved in the process of keeping your pin sites clean, and will have total responsibility for this by the time you go home from the hospital. This can take a little getting use to, but the nurses will be there to reassure and teach you.

This brochure explains much of what is involved, and the importance of taking an active role in your treatment. It also provides you with a reminder of important steps in pin site care. **However, these** can only be general guidelines, you should always follow the instructions of your surgeon.







CARE AND CLEANING

What do I need to do?

You should treat your external fixator with care and maintain clean, dry pin sites. Starting with the first day your fixator is applied, and until the day your fixator is removed, your pin sites will require a cleaning regimen which should be painless for you to perform. Instructions on pin-site care may vary slightly, but there are commonly accepted guidelines for you to follow.

Your surgeon may choose to change a cleansing solution or cleansing regimen, but generally you will use the following supplies:

- Cleansing Solution; Sterile Water
- Disposable Cups to Hold Cleansing Solution
- Sterile Gauze Dressing:
- 2"x2" (5x5cm) and 4"x4" (10x10cm)
- Sterile Cotton Swabs
- Bag for Waste Disposal

Follow these next steps two times daily:

Step 1. Prepare the cleaning supplies.

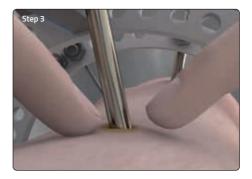


Step 2. Wash your hands thoroughly, including between fingers and the back of each hand. Only use soap that is reserved for you and clean paper towels. Don't touch anything else before starting the cleaning procedure such as your wheelchair or crutches. If you have to remove dressings from the pin sites, wash your hands again, and when you finish your cleaning wash them a final time. Hand washing is the single most important factor in preventing infection. Use a clean paper towel to dry your hands and dispose of it after use.



Step 3. Gently massage the skin around the pins with your fingertips to make sure that the skin is free to move slightly. This brings any drainage to the surface so that it may be cleaned away.

Step 4. Saturate a sterile cotton swab with the cleansing solution selected by your surgeon. Gently apply the solution directly to one pin site at a time. Swab in a circular motion, always moving away from the pin. Remove any crust which may have formed. Change cotton swabs as often as necessary. After all the drainage is removed, dry the pin site with a new cotton swab. Start with a new sterile cotton swab for each pin site.





Step 5. Clean the entire length of each pin with a new sterile cotton swab or a 2"x 2" (5x5cm) sterile gauze pad, using a new pad for each pin.



Step 6. Wrap sterile gauze loosely around the pin site. If there are raw edges of gauze, roll them inside so that no loose filaments get into your pin sites. Placing your fingers over the gauze, gently press down on the skin around the pin site. After the first few days, when the pin sites are dry, gauze should not be used. Instead, the pin sites should be left uncovered and exposed to the air.





Step 7. You must also take care of your external fixator. The entire device should be cleaned using cleaning solution, $4^{n} \times 4^{n}$ (10x10cm) gauze dressing and cotton swabs. Please pay attention not to alter the different elements of the fixator. Detergents with fluoride, chloride, bromide, iodide or hydroxyl ions MUST NOT be used.



Step 8. Place all materials used for cleaning into a bag for disposal. At the end of each session, wash your hands.



In the shower

Your surgeon may allow you to shower with external fixator approximately 10 days post surgery.

While in the shower, gently clean your external fixator. Afterwards, dry the fixator thoroughly with a clean towel. Continue to clean your pin sites in the manner described above.

How will I know if I get an infection?

Even with excellent pin-site care, there is a chance that pin sites may become infected or cause complications. It is possible that you might see one or more of the following symptoms of infection:

- Redness at the pin site
- Swelling at the pin site
- Thick or colored discharge from the pin site
- Loosening or movement of the pin
- Persistent pain or soreness at the pin site

If you experience any of these signs or if you have doubts on the pin site cleaning procedure, you should contact your surgeon's office immediately.

If your surgeon has prescribed antibiotics to ward off possible infection, be sure to take them as prescribed until all the medication is used. Remember to clean your pin sites daily even if you are taking an antibiotic.

