External Fixator Pin Care

Why is pin care important?

The area where the pin meets the skin is called the pin site. The opening must be kept clean to decrease the risk of infection. Infection can cause the pin to loosen, require its removal prematurely or the infection can spread to the bone. It is essential that you care for your pin sites correctly to allow for more comfortable healing and prevent additional surgeries.

How do I care for the external fixator and pin sites?

After surgery, your pin sites will be dressed with gauze and this dressing will remain in place for approximately 7-10 days or until your first post-op appointment. After your first post-op appointment, you will be able to start to shower. While in the shower, gently clean your fixator and your skin with antibacterial soap and water. Unless cleared by your surgeon, do not submerge your pins under water (i.e., do not take a bath or get into a pool). Afterwards, dry the fixator thoroughly with a clean towel. Now you can start your pin care.

How do I care for my pin sites?

Complete pin care once a day to keep the pins clean. Usually this is best done after your daily shower. You may watch this video for a brief overview on pin site care. [https://jwp.io/s/fuWji0Bs](https://jwp.io/s/fuWji0Bs)

Supplies:

- 2 clean disposable cups (Dixie cups work well)
- Normal Saline or Sterile water (Tap water can be sterilized by boiling for 10 minutes and let cool completely)
- ½ and ¾ mix of Hydrogen peroxide and normal saline/sterile water (Only needed if you have crusting on your pin sites)
- Clean cotton swabs (Q-tips)
- 2 inch by 2 inch Gauze squares (can be found in large packs at the drug store)
- Clean scissors with alcohol to cut slits in the gauze (only used for pin care)
- Paper tape (found in first aid section of drug store)

For pins WITHOUT crusting:

1. Wash Hands.
2. Fill one cup with sterile water/normal saline.
3. Remove old gauze squares and place in the trash, and then wash hands again. If the gauze is stuck, you may run normal saline or water over the site until they loosen. This will cause less pain and bleeding.
4. Check the pin sites for signs of infection including redness, tenderness, and thick, foul-smelling drainage. If signs of infection are present, call your orthopaedic provider.
5. Wet cotton swabs with the water/normal saline.
6. Gently clean skin around the pins, using friction to help remove drainage or scabs from around the pin site. Use a new swab with each pin site.
7. Cut a slit in the gauze square so that it will fit around the pin.
8. Put the gauze square around the pin and tape in place.

For pins WITH crusting:
1. Wash Hands
2. Fill one cup with normal saline/sterile water and the other cup with ½ normal saline/sterile water and ½ hydrogen peroxide.
3. Remove old gauze squares and then wash hands again. If the gauze is stuck, you may run normal saline or water over the site until they loosen. This will cause less pain and bleeding
4. Check pin sites for signs of infection including redness, tenderness, and thick, foul-smelling drainage. If signs of infection are present, call your orthopaedic provider.
5. Wet cotton swabs with water/hydrogen peroxide mixture.
6. Gently clean skin around the pins, using friction to help remove drainage or scabs from around the pin site. Use a new swab with each pin site.
7. Gently remove crusts as they are loosened.
8. Wet new cotton swabs with water from the cup.
9. Gently rinse the pin sites. Use a new swab for each pin site.
10. Cut a slit in the gauze square so that it will fit around the pin.
11. Place gauze square around the pin and tape in place.

How will I know if I get an infection?
Even with proper pin site care, your pin sites may still become infected. Signs of infection include redness or swelling at the pin sites, yellow, thick, or foul-smelling drainage around the pins, and fever of 101.5 degrees or higher. If you experience any of these symptoms, start the antibiotics prescribed by your provider and call the Orthopaedic Clinic Nurse. Make sure you take the antibiotics as prescribed (usually a 7- or 10-day course).

Call the Orthopaedic Clinic if your child has:
- Fever greater than 101.5F
- Pain that is not relieved by pain medicine
- Drainage from incision
- Signs/symptoms of wound infection: redness, swelling, fever, pus or foul-smelling odor from incision
- Change in sensation (numbness, tingling, cool to touch)
What else should I know?

Follow your weight bearing restrictions prescribed by your doctor at ALL times. Do not use powders, lotions, or antibiotic ointment near the pin sites. Avoid wet floors (rain, ice, snow) because you may slip. Wear loose fitting clothes. We encourage you to keep the external fixator covered if you are outdoors to avoid infection. We can supply a stretchy cotton covering to put over the fixator. Alternatively, you can purchase custom external fixator covers online on Etsy.com.

Follow Up Appointment:
Your first post-op appointment and x-ray will be approximately one to two weeks after discharge from the hospital. You will also need to plan for multiple follow up appointments with your orthopaedic surgeon to assess healing. You can reach the appointment line by calling 510-428-3238.

Contact Numbers:
If you have a question or concern about your child, please call us:

- Weekdays (8-4:30pm): 510-428-3238 and ask to speak to your surgeon’s nurse
- After 4:30pm or Weekend/Holiday: 510-428-3000 (main hospital number) and ask to speak to the orthopedic resident on-call