



### External Fixator Pin Care

- If appropriate pin care technique is used, the pin sites will completely heal around each individual pin, much like a pierced earring insertion site heals. Once healed, only showering, without any other pin cleaning procedures, is necessary.
- The occasional removal of a serous crust around the pins using dilute hydrogen peroxide and saline may be necessary using a sterile swab. A sweeping motion with the swab, to remove the debris from the interface between the skin and pin is necessary. In general, recommendations include using normal saline as the cleansing agent in concert with dilute hydrogen peroxide.
- Patients may shower daily using **Hibiclens** when given clearance by the orthopedic surgeon.
- **Avoid ointments** for postcleansing care, as these tend to inhibit the normal skin flora and alter the normal skin bacteria, and thus can lead to superinfection or pin site colonization. It is important to remove the buildup of crusted material, which will tend to stiffen the pin–skin interface and increase shear forces at the pin–bone interface. This leads to the development of additional necrotic tissues and fluid buildup around the pin.
- Immediate postoperative **compressive dressing** should be applied to the pin sites to stabilize the pin–skin interface and thus minimize pin–skin motion, which can lead to additional necrotic debris. Dry clean gauze pads are placed firmly around the base of each pin and wrapped with a “Kling” or “Kerlix” roll dressing. By “training” the skin, the pin site remains stable. This allows the skin to heal around the pin undisturbed. Compressive dressings can be removed within 10 days to 2 weeks, once the pin sites are healed.
- If pin drainage does develop, then providing pin care three times per day should be undertaken. This may also involve rewrapping and compressing the offending pin site in an effort to minimize the abnormal pin–skin motion.

### Pin Site Care for the External Fixator

1. Pin site care should be done once times daily unless otherwise specified by your doctor.
2. Wash your hands with soap and water before beginning.
3. Gather all materials you will need -- Hydrogen Peroxide, cotton-tip applicators and gauze pads, disposable non sterile rubber gloves.
4. Wear disposable non sterile rubber gloves.
5. Remove old dressings and dispose of them properly.
6. Look closely at each pin site.
7. Use on cotton-tip applicator per pin site and clean around each site using a circular motion.
8. Push the skin down around the pin site as it has a tendency to “creep up.”
9. Work hard to remove all crusting and dried drainage.
10. Apply gauze pads wrapped firmly around the base of each pin, and then wrap the entire arm or leg with rolled gauze to keep the gauze pads in place.
11. Clean up and dispose of all of the used supplies.
12. Wash your hands with soap and water.

### Watch for signs of infection

- Temperature over 101°
- Thick white, yellow, or green drainage
- Redness, warmth, or swelling at the pin site
- Bad smell from the pin site
- Severe pain at the pin site

*Call the office if signs of infection develop*



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Supplies required for a week of pin care

1. Disposable non sterile rubber gloves (one box)
2. Peroxide (1 Pint)
3. Sterile cotton tip applicator swabs (#100)
4. Sterile 4X4 inch cotton weave gauze pads (#100)
5. Sterile "Kling" roll gauze, 4" wide, (#30)
6. Hibiclens antiseptic/antimicrobial skin cleanser (8oz.)

Use as directed by MD.

Refills as needed \_\_\_\_\_

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*James T. Mazzara, M.D.*