

Home Care Information: External fixator removal

Your pet has had all or some of the metal pins removed from the bone. When this apparatus is removed or reduced, the healing fracture site will be under more stress. This is another time period when activity must be reduced to minimize the load on the fracture. If the fracture was healing well, but not adequately enough for complete removal, only some pins were removed (we call this “dynamization”). This will allow the fracture to have some continued support, but the bone will also “see” some more stress and healing will speed up. If the fracture was well healed, the pins were all removed. The holes that remain after pin removal are weak spots and need time to fill in before the bone is strong enough for normal activity. **If pins remain, the implant care activities must continue as outlined below.** Once healing is appropriate, the benefits of this system allow for complete implant removal; pets will not have any long term activity restrictions.

ACTIVITY RESTRICTION

- Please keep your pet in a comfortable, safe indoor location with no free access to stairs for the next 24-48 hours as he/she recovers from anesthesia or sedation. Your pet may whine or appear more anxious than usual; this may indicate pain/discomfort or side-effects of the medications. Please call your veterinarian for assistance with medication adjustments or return for exam & additional pain medications as needed.
- Confine your pet to one level/section of the house on carpeted floors. Use baby gates, etc. to prevent access to slippery floors or stairs. Do not allow jumping on/off furniture. Confine to a small area/room/crate when unattended. Please do not allow any playing, running, jumping. For dogs, use a short leash when going outside to urinate/defecate.
- Your pet should resume using the leg to the same level as before pin removal in 2-3 days. Thereafter, leg use should continue to improve. If he/she suddenly deteriorates or does not appear to be progressing well enough, please return to your veterinarian for exam; x-rays may be needed to diagnose the problem.
- Your pet will feel like fully using the leg before the bone is healed. Please continue restrictions during this difficult time when he/she is feeling “too” well! Failure to do so may cause serious healing problems.

PIN TRACT CARE

- The pin tracts (i.e. holes) where pins were removed will drain bloody fluid for 12-24 hours. Thereafter, they should be dry, and scabbed over. Over the next week, they should heal closed. *Problems to call your veterinarian about:* persistent pus-like discharge, pink/fleshy tissue growing out of pin tracts.
- If pins remain, note that the pin tracts should have no redness, bulging pink tissue (i.e. granulation tissue) or pus-like discharge (crusting on the bandage is normal.) Pins closest to joints often suffer from inflammation (and signs listed above) due to the motion in these areas; careful attention to bandaging in these areas is important.

BANDAGE CARE AND TECHNIQUE (*if pins remain*)

- The goal of bandaging of external fixators is to immobilize the skin relative to the pins; if the pins rub back and forth on the skin, the tracts will become inflamed and pin loosening can occur.
- The “fluff-n-stuff” bandage works well to achieve this goal. Gauze squares are unfolded (“fluffed”) and crumpled into a loose ball and “stuffed” under the bar next to the pins. This is continued until all pins are surrounded by fluffed gauze. This arrangement of gauze is “captured” by elastic bandage material wound around the apparatus from top to bottom, but NOT around the leg. The elastic bandage material can be passed in a figure-8 over the top of the pins to complete the bandage. Additional squares of gauze can be incorporated into this arrangement to protect the environment from sharp ends of pins/bars. ****Note:** do not fold the gauze up into a tight wad; this arrangement is not forgiving enough on the skin, and can result in local pressure sores.

(If provided/available, you may also use surgical sponges to “stuff” under the bar next to and around pins. Cut one or more slits in the sponge and stuff it around the pins under the bar. Capture this arrangement with the elastic bandage as described above.)

- This bandage should be changed weekly. You may adjust for a longer or shorter wear period depending on pin tract health. If tracts are dry, extend wear by 1-2 days; if tracts are moist or granulation tissue is present, shorten the wear by 1-2 days (and be careful to pack the problem pins more firmly with fluffed gauze or sponges.)

PROGRESS EXAMS

- Return to your veterinarian in 4 weeks for a progress exam. Skin healing and leg function will be evaluated, and additional x-rays will be taken if needed. Remaining pins, if present, may be removed at this time as well.

PHYSICAL THERAPY REGIMEN

(We can also recommend professional physical therapy assistance in the Twin Cities. Studies have shown that a formal program can decrease post-operative recovery time. Please let your veterinarian know if you are interested in a referral.)

- Our lives are often very busy, so if you must err, err on the "do less" side of these instructions. Less physical therapy will result in a slower return to function, but more aggressive physical therapy by a non-professional too early may result in failure of the implants and surgical repair.
- *Week 1:* After pin removal, apply ice packs (wrapped in thin cloth) to the pin tract area twice daily for 10-15 minutes. Baggies of frozen peas work well for this, or make an ice pack by freezing 2 parts isopropyl alcohol to one part water in a ziplock bag. Continue 3 days for pain relief.
- *Please review your initial discharge information for physical therapy activities and schedule. Changes in the timeline are noted below:*

- Swimming is wonderful rehabilitation exercise (for some dogs) when performed correctly. You may allow controlled swimming after all pins are removed (wait 5 days for pin tracts to seal). Controlled swimming requires that your pet not jump or leap into the water; walking into the water until it is deep enough to swim is required. Throwing balls to fetch often results in sudden jumping and lunging, which can cause serious problems in the healing phase. Do not over extend your pet; start with short excursions (5 minutes) and increase duration and frequency gradually.

LONG TERM LIFESTYLE

- After the fracture is fully healed, there are no restrictions on activities for your pet. A gradual return to full function should occur, to allow for a smooth return of muscle function and strength following the restricted period.