Post-operative Information: Elbow Luxation

Your pet has had a luxation (i.e. dislocation) of the elbow joint reduced (i.e. replaced) and stabilized with external splint support alone or in combination with internal surgical stabilization. Internal stabilization involves direct repair of the ligaments torn when the elbow luxated; this repair must be supported to allow for permanent scar tissue to return the damaged ligaments and joint capsule close to their original strength. Although the majority of patients will not have a repeat of their luxation, the elbow joint is very unforgiving with respect to trauma. Long term joint stiffness and degenerative joint disease (i.e. "arthritis") may be a complication that must be managed.

ACTIVITY RESTRICTION x 6 weeks

- Please keep your pet in a comfortable, safe indoor location without free access to stairs for the next 24 hours as he/she recovers from anesthesia and surgery. Your pet may be groggy for the first few days. He or she 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 and additional pain medications as needed.
- Confine your pet to one level/section of the house on carpeted floors. Use baby gaits, etc. to prevent access to slick 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 or jumping. For dogs, use a short leash when going outside to urinate/defecate.
- Your pet should start touching his/her toe down within the first 2 weeks. Thereafter, leg use should steadily improve each week. By 6 weeks, he/she should be 90% recovered. 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 using the leg normally before the bone is healed. Please continue the restriction during this difficult time when he/she is feeling "too" well! Failure to do so may cause serious healing problems.

INCISION CARE (if an incision is present)

- The incision, if present, likely will be covered by the splint. If you notice "strike through" of wound drainage through the bandage, please have your pet evaluated by your veterinarian.
- Do not allow your pet to lick or chew the incision near the top edge of the bandage. Pets tend to want to lick early in the healing period and this can compromise the incision and predispose to infection. If necessary, please use an E-collar if you must leave your pet unattended.

BANDAGE/SPLINT MANAGEMENT

- Your pet has had a bandage applied to protect an injury or surgical site. Careful monitoring and maintenance is necessary for safe and effective bandage wear. *Major problems can result from simple bandages; please do not hesitate to call your veterinarian if any problems are noted.*
- Please monitor the bandage for slipping or damage from chewing, etc. If it changes position or looses its integrity (i.e. section is chewed off), serious problems may occur with healing or new problems with pressure sores may develop. Please call if any changes in bandage position occur; the bandage may need to be replaced.
- Check the two central toenails twice daily (i.e. look at or feel them). They should be close together. If they are spreading apart, this indicates toe swelling which can result in serious complications, and the bandage needs to be assessed by a veterinarian within 4-6 hours. Please call your veterinarian (or see your local veterinary emergency clinic) if any swelling is noted.
- Please keep the bandage clean and dry. Place a plastic baggy on the end every time your pet goes outside. Remove the bandage when indoors. If the bandage gets wet or you notice any bad odor coming from the bandage, it will need to be evaluated within 4-6 hours; serious skin problems may develop.

PROGRESS EXAMS

- Return to your veterinarian in 5-7 days for a progress exam. Splint integrity and wear will be evaluated and replaced if necessary.
- Return again to your veterinarian 10-14 days after repair for a second progress exam. The splint will be removed, sutures will be removed, and the elbow joint will be evaluated for stability. The splint may be replaced if necessary for an additional week if weakness is still noted in the joint. Leg function will be evaluated, and physical therapy recommendations will be adjusted.

DIET

- Ideally, keep your pet on the thin side of normal his/her whole life. Any orthopedic condition can progress with arthritis over time with excessive, wear & tear; carrying less body weight will relieve some of this stress from the elbow (and other) joints. Good parameters to monitor body condition are:
 - 1) you should be able to feel the ribs and pelvic bones, but not see them; 2) your pet should have an "hour glass" figure when viewed from above looking down; 3) your pet should have a tucked up belly when viewed from side.
- Glucosamine/chondroitin supplements, promoting healthy joint cartilage, might have some beneficial effects in these cases but that this has not been clearly established. You and your veterinarian should discuss whether or not these products would be helpful for your pet long term.

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.) ***A video demonstration of exercises can be found on our website: www.clvsurgery.com under the "Post-Operative Care" section ****

- 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. Once the splint is removed, begin the following exercises.
- Week 3. Massage-- Have your pet lie on his/her good side. Perform both superficial skin massage and deeper muscle massage. Skin massage around the upper arm and elbow involves using your fingers loosely on the surface of the skin, applying enough pressure to move the skin relative to the underlying tissues. Muscle massage of the upper arm involves deeper kneading and pushing of the muscles. Perform massage for 10-15 minutes twice daily. Continue 4 weeks.
- Week 3. Extension-only Range of Motion Exercise-- Have your pet lie on his/her good side. Apply a warm compress to elbow. Slowly pull the foot and push from behind the elbow into full extension of the elbow; hold for 5 seconds and release. Repeat this motion 15-20 times twice daily. This exercise should not be performed to the point of pain or resentment. Continue 1 week.
- Week 4: Full Range of Motion Exercise-- Have your pet lie on his/her good side. Apply a warm compress to elbow. Grip the foot with one hand and slowly and gently push the foot up into flexion of all joints; hold for 5 seconds. Slowly pull the foot and push from behind the elbow into full extension of the elbow; hold for 5 seconds. Repeat this motion 15-20 times twice daily. This exercise should not be performed to the point of pain or resentment. Continue 4 weeks.
- Week 6: Active exercise (for dogs)-- Place your pet on a short leash and have him/her walk at your side. Walk outside on even/solid footing for 10 minutes twice daily. Continue 4 weeks.
- Swimming is wonderful rehabilitation exercise (for some dogs) when performed correctly. You may allow controlled swimming after week 4. 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 supporting tissues of the elbow are 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.
- Elbow joints can be very unforgiving following a serious injury; stiffness and discomfort can be signs of degenerative joint disease (i.e. arthritis) that may progress over time. Maintaining a lean body condition and a moderate degree of low-impact activity will be very helpful in optimizing the long term function of your pet's elbow.