The most common orthopedic conditions seen in a small animal private practice are cruciate tears, fractures, luxations, hip dysplasia, arthritis, amputation, tendon repair and bone biopsies. While each of these conditions/procedures have their own variations on what the patient needs, in general terms they are all very similar, especially in the early postoperative period, while in hospital.

Due to the condition of the animal, many are unable to walk before and sometimes after surgery, without assistance. Also some animals may want to walk, or even run, but are not allowed due to instability or potential harm to themselves. For this reason slings, gurneys and stretchers may be used to transport our patients. Care givers should be mindful of fear as well as pain, which often may indicate the use of a muzzle, especially in trauma cases in the preoperative period.

After surgery, most orthopedic patients will have radiographs taken immediately following surgery as well as during recheck examinations. For postoperative films it is imperative to know this ahead of time so a second machine may be tested and in place to avoid excess time under anesthesia. Preordering films on the digital server, telling other staff prior to moving the anesthetized patient and having a clear order on the views to be taken will limit wasted body temperature, blood pressure and time under anesthesia. Postoperative radiographs are typically taken when implants are put into the patient, when implants are removed and to document the fixation method. Certain cruciate surgeries need specific views taken for postoperative measurements to assess the success of surgery. You should wear lead gowns, gloves, thyroid protectors as well as a radiation badge every time you take a radiograph.

After the patient is awake they may also need help ambulating with a sling for balance, to prevent slippage or to protect the surgical repair. Slings for the patient may be placed to control movement, produce a non-weightbearing gait, or cushion the surgical repair. Depending on the indication, the sling may be in place for weeks to months. When slings are sent home on a patient, proper owner education is vital to successful care. The owners should assess the sling three times daily for slippage, making sure it is clean, dry and not too tight.

Slings are often used for the owner as well. Slings can be purchased to help them carry their pet, assist in walking or make it easier to traverse stairs. Some slings and harnesses are made to remain on the dog all day, others are to be used just when walking the patient. It is important the owners understand the difference and know where to watch for rub sores or irritation. It is a good rule to use a supportive slings on orthopedic patients on all slick floors, including when they return for recheck examinations. These slings are used to prevent them from falling and injuring themselves while they are healing.

In some instances, special braces and prosthetics can be used to replace bulky bandages for more chronic orthopedic patients. Commercial braces should be gradually introduced to assure they use the brace and do not develop pressure sores or chew on it. Custom braces and orthotics are easily made with a cast mold for a perfect fit, but can be quite costly for the temporary orthopedic condition.

Incisional care is vital to preventing an infection. If an infection reaches the depth of an orthopedic implant, those implants will have to be removed with another surgery once the bones have healed. Bacteria form a glycocalyx over the implants that prevents antibiotics from completely clearing the infection. However, if the surgery is stable and has a good blood supply with a properly confined patient, the bone can heal in the face of infection. But the infected implants will have to be removed, cultured and antibiotics continued based on that culture.

Incisions should be kept clean, dry and intact. A healthy incision will have minimal bruising and minimal discharge. A serosanguinous or resolving sanguinous discharge can be seen for 1-3 days, especially after an arthroscopic procedure. Swelling should resolve and move ventral/distal with gravity. Clod packs are used for the first 2-3 days after surgery to help minimize swelling and bruising. They should be placed in a thin paper towel and placed on the incision and around the leg for at least 15 minutes. Cold packs can penetrate 3cm. They can be made using commercially available products, a bag of frozen vegetables, or a Ziploc back with 1:3 alcohol:water to create a pliable and moldable pack. Cold packs should not be started until the patients core body temperature has recovered after anesthesia. After 3 days, warm packs should replace the cold packs. Warm packs help with pain relief and healing. Ideally these would be performed 3-5 times a day for 15 minutes. If the patient develops a seroma during the recovery period, strict cage rest and frequent warm packs will resolve it in a few days. Do not aspirate seromas to avoid making them into potential abscesses. Warm packs can be commercial packs, microwaved tube socks filled with lentils or a microwaved wet towel placed in a Ziploc. Again the warm pack should be wrapped in a thin paper towel before applying it to the incision and wrapping it around the leg. You do not want to place a wet thermal pack on a fresh incision to avoid potential nosocomial infections.

External fixators require bandages for the postoperative period to help with swelling. Several days after surgery the bandages are usually changed to a smaller less cumbersome bandage. These bandages are to prevent selftrauma to the patients other legs or household furniture with the fixator pins and clamps. Exfix pins should be checked 2-3 times a day assessing for drainage, swelling, and trauma. Some clinicians like to clean the pin tracts several times a day while others leave them to form a scab or seal over the pin.
Any bandage needs to be protected from the environment when the animal uses the restroom. An IV bag, or commercial product is useful to prevent a bandage becoming prematurely soiled. However, many owners are tempted to leave on the bag and must be instructed to remove it to avoid excessive humidity soaking the bandage from the patient’s own foot.

Since orthopedic patients have so many more things going on while in hospital. Communication and documentation are vital. Every day’s SOAP should comment on the incision, bandage and leg usage. A sudden change in leg usage is cause for concern and should be addressed immediately.