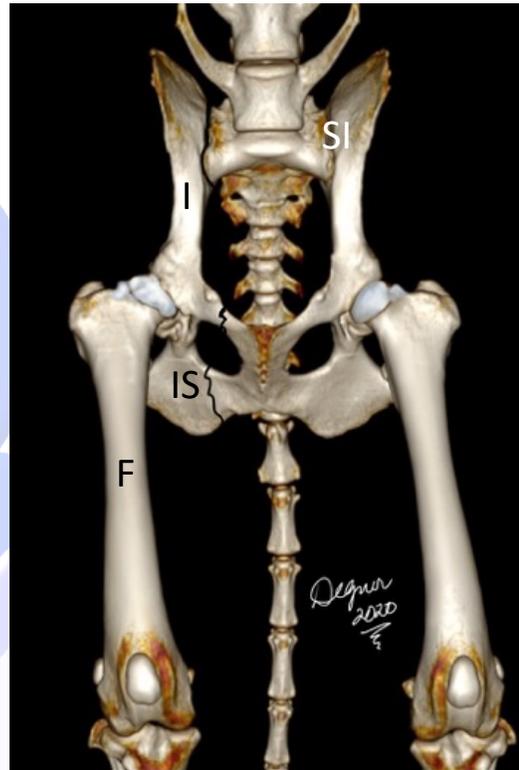


## Pelvic Fractures in Dogs

### Anatomy

Anatomically the pelvis is somewhat like a box. The front part of the pelvis is attached to the spine by the sacroiliac joint (SI). The Ilium is the part of the pelvis that extends forward from the area of the hip joint. The acetabulum (A) forms the cup of the hip joint. The pubis is a strut like connection of the pelvis that connects the floor of the pelvis to the acetabulum. The ischium (IS) is a table-like portion of the back part of the pelvis. The femur bone has a ball that fits into the cup or socket of the acetabulum. The colon, urethra, vagina, blood vessels and sciatic nerve pass through the canal of the pelvis.



### Signs and diagnosis

A fracture is synonymous with a broken bone. Because the pelvis is like a box, it must be broken in two or more places for the pelvic bones to be unstable. The most common cause of pelvic fractures is trauma such as being struck by a motorized vehicle or taking a fall. Affected pets will bear minimal to no weight on the fractured side of the pelvis. If both sides of the pelvis are fractured, then the pet may not be able to walk at all. X-ray images are required to make a diagnosis of pelvic fractures. Damage to the sciatic nerve may occur from direct trauma to the pet during the accident or may occur if the nerve gets trapped between fractured bones. The surgeon will also evaluate the urinary tract to make sure that the bladder has not been ruptured. In addition, chest x-rays are made to ensure that there is no trauma to lungs, ribs, and diaphragm. If the pet has complex fractures of the pelvis, CT scan may be needed for surgical planning purposes and to rule out other conditions that may not be evident such as spinal trauma. Should there be significant trauma to these other organs, surgery may be delayed so that your companion can safely undergo anesthesia and the surgical procedure.

### The day of surgery

In preparation for anesthesia, results of your companion's blood work will be reviewed. Our anesthesia and surgical team will prescribe a pain management program, both during and after surgery that will keep your companion comfortable. This may include a combination of general anesthesia, injectable analgesics, epidural analgesia, oral analgesics, and anti-inflammatory medication.

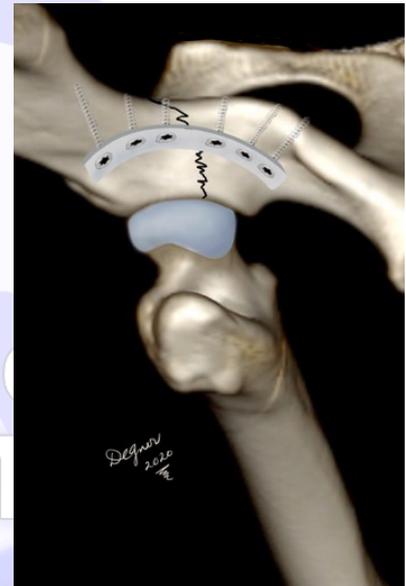
### Surgery

Fractures of the pelvis that involve the hip joint, ilium and the sacroiliac joint usually need to be repaired. Fractures of the ilium and acetabulum are repaired with a plate and multiple screws (see illustrations below). If the sciatic nerve function is impaired, surgery should be performed as soon as possible to release pressure off the nerve, in the hope to prevent permanent damage. Dislocation of the sacroiliac joint is repaired using one or two screws (see illustration below).



## Home care

After surgery, you can continue to give your pet a prescribed pain reliever to minimize discomfort. It's also extremely important to limit your pet's activity and exercise level during this post-operative period. Rehabilitation exercises can be done at your home or if you choose, by professionally trained therapists at an animal rehabilitation center. Rehabilitation therapy should be continued until your dog is bearing weight well on the operated limb (typically 2 - 4 weeks after surgery). Detailed instructions will be given to you after the surgery. The surgeon will monitor the healing process with two follow-up exams. The first is scheduled at two weeks after the surgery and the second is at five to eight weeks after the surgery; during the second visit the repaired bone will be x-rayed. By 8 weeks after surgery, most dogs and cats are fully weight-bearing on the operated limb, although exercise should be limited during the first three months after the procedure.



## Results

Surgical repair of pelvic fractures has benefits of early pain relief, less collapse of the pelvic canal and impingement on organs that pass through the canal, and relief of pressure off the sciatic nerve if it is entrapped. If present, nerve damage has been reported to recover in 81% of patients that have pelvic fractures. Uncommon complications after surgery may include break down of the repair (due to lack of exercise restriction), nerve damage, poor bladder control, and fecal incontinence.

## Reference

Jacobson A, Schrader SC. Peripheral nerve injury associated with fracture or fracture-dislocation of the pelvis in dogs and cats: 34 cases (1978 – 1982). J Am Vet Med Assoc. 1987 Mar 1;190(5):569-72.

## Assessment and recommendations

Patient: \_\_\_\_\_ Date: \_\_\_\_\_

### Treatment

- Surgery is recommended
- Conservative treatment is recommended

### The following has been prescribed

- No medications or special diet are necessary at this time
- Pain controlling medication: \_\_\_\_\_
- Nonsteroidal anti-inflammatory medication: \_\_\_\_\_
- Antibiotics: \_\_\_\_\_

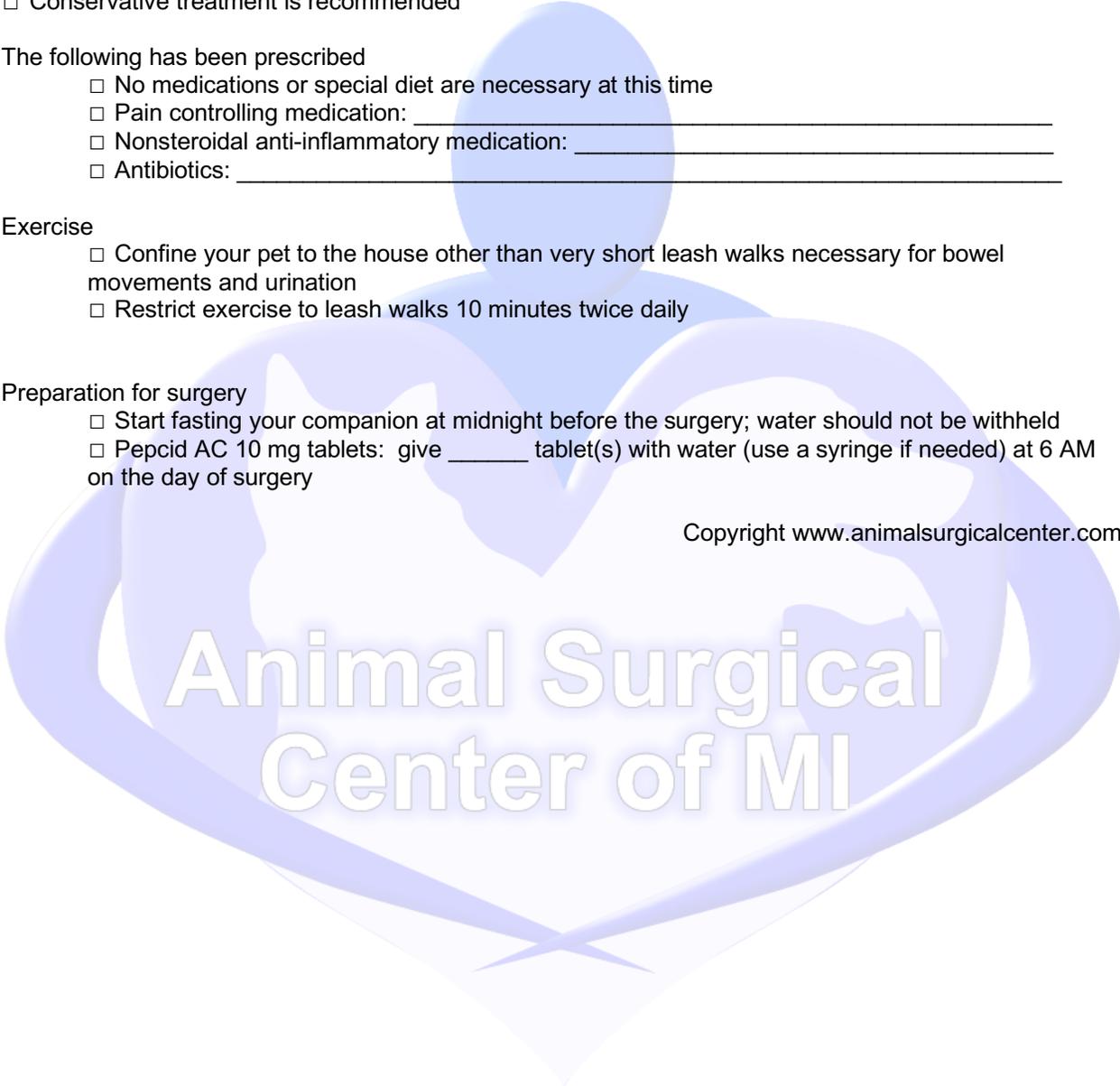
### Exercise

- Confine your pet to the house other than very short leash walks necessary for bowel movements and urination
- Restrict exercise to leash walks 10 minutes twice daily

### Preparation for surgery

- Start fasting your companion at midnight before the surgery; water should not be withheld
- Pepcid AC 10 mg tablets: give \_\_\_\_\_ tablet(s) with water (use a syringe if needed) at 6 AM on the day of surgery

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