

## Coxofemoral Joint Luxation: When to Reduce Closed and What to do When You Can't

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This presentation will cover all aspects of coxofemoral joint luxation that are relevant to the general practitioner and emergency veterinarian. Normal anatomy of the hip should have the head of the femur seated deeply within the acetabulum with at least 50% coverage of the femoral head. The ligament of the head of the femur and the joint capsule are the primary stabilizers of the hip with the surrounding musculature playing a secondary role. In dogs with craniodorsal hip luxation the clinician can palpate the wing of the ilium, greater trochanter, and ischiatic tuberosity in a straight line. Trauma accounts for 60-80% of hip luxations, however, dogs with dysplastic hips may have coxofemoral luxations with minimal trauma. Therapeutic options include closed reduction with placement of an Ehmer sling or hobbles, in the case of a ventral luxation, or open reduction with placement of a prosthetic capsule, toggle pin fixation, or iliofemoral suture. As a salvage option, femoral head and neck ostectomy or total hip replacement can be offered.

Closed reduction is most successful within 24 to 48 hours following luxation, but is contraindicated in patients with severe hip dysplasia, avulsion fractures of the femoral head, loss of supportive soft tissue structures leading to immediate relaxation, or injuries to the contralateral limb. Approximately 50-70% of dogs that undergo closed reduction will re-luxate. Open reduction and femoral head and neck ostectomy are performed via a craniolateral approach to the hip. Following surgical replacement of the femoral head, placement of a toggle pin or prosthetic capsule can be performed. Iliofemoral suture is preferred in juvenile patients to avoid damage to the capital physis. Femoral head and neck ostectomy (FHO) is a salvage option for dogs with fractures or dysplastic coxofemoral joints. Outcomes are most successful in smaller pets in good body condition with good musculature, however, all pets are candidates for the procedure. Postoperative rehabilitation is critical to maximizing the functional outcome following FHO, but some degree of mechanical lameness is expected. Removal of the entire femoral neck from the greater trochanter to the lesser trochanter minimizes the risk of continued bone-on-bone contact and discomfort.

After this presentation, the practitioner should be able to diagnose hip luxation, evaluate patient history and pelvic radiographs for suitability of closed reduction, and perform a closed reduction of the coxofemoral joint. The practitioner should also be able to appropriately select an internal stabilization technique for open reduction. Finally, the practitioner should be able to perform a femoral head and neck ostectomy.

### References:

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