

## UPDATE ON COXOFEMORAL JOINT LUXATION

Coxofemoral joint luxation is a common orthopaedic presentation in dogs. Coxofemoral luxations are typically described by the direction of luxation, with cranio dorsal luxation being the most common. Coxofemoral luxation is typically a result of blunt force trauma, but can also be secondary to severe hip dysplasia, or other conformational abnormalities.

Ventral hip luxations are far less common than cranio dorsal luxations, and there is little information available as to the best treatment options. It typically occurs in small breed dogs such as poodles, or poodle crosses (cavoodles) and does not always have a traumatic cause. A combination of factors such as laxity of or trauma to the ventral coxofemoral joint capsule and disruption of the femoral capital ligament contribute to the development of the disease.

Conservative management is frequently successful in treating ventral hip luxation. The treatment protocol involves reducing the hip under general anaesthesia and then applying a hobble bandage for 4-6 weeks to limit abduction of the limb, thereby avoiding ventrally directed force on the femoral head contributing to luxation. The theoretical basis of this treatment is that the limiting of ventrally directed force allows the joint capsule to heal and avoid recurrence.

In cases where ventral hip luxation recurs following conservative management, then surgical therapy may be recommended. At this time it is not clear what the best surgical technique might be, or whether it should be recommended before a period of conservative management. [Dr Nick Cleland](#) (VSS Surgical registrar) along [Dr Peter Delisser](#) and [Dr David Cook](#) have authored a publication in the December 2019 edition of [Australian Veterinary Practitioner](#) describing a novel surgical approach for treatment of ventral hip luxation in two dogs.

This technique involves a ventral approach to the coxofemoral joint and application of a toggle-rod device from this ventral approach. The ventral approach avoids disruption of the dorsal joint capsule to place the toggle rod, and allows the surgeon to repair or tighten the ventral joint capsule as well. This addresses both the loss of the femoral capital ligament (the toggle-rod) and the laxity or tear in the ventral joint capsule. Both dogs in the case report successfully returned to an active lifestyle and no complications were encountered.



Cranio-dorsal hip luxation can also be treated in a variety of ways. Non surgical management can be attempted in dogs that do not have pathology affecting the acetabulum or femoral head (such as severe osteoarthritis, coxa plana or minor articular fractures). Conservative management may be successful in less than 50% of cases and typically involves closed reduction of the coxofemoral joint under anaesthesia, application of an ehmer sling and subsequent confinement. The theoretical basis of this approach is that the joint capsule may heal adequately in that time to allow the joint to stay reduced. Further confinement for a month should be advised to consolidate this healing. A recent study in the Journal of the American Veterinary Medical Association (First author = Schlag – link to pubmed citation [here](#)) showed that 43% of cases treated with closed reduction and ehmer sling reluxated and 18% of dogs suffered soft tissue (skin) injuries from the sling. There was no comparison group (surgical treatment) to allow a evidence based differentiation from a single study of the best primary treatment option.

Surgical treatment options vary but include [total hip replacement](#) (particularly for dogs with fractures or dysplastic hips), and toggle rod repair with accompanying joint capsule augmentation. There are a variety of other repair techniques that are less frequently used depending on the type of joint capsule damage present and the direction of luxation. The goal of treatment is to restore the primary stabilisers of the hip joint (the femoral capital ligament, the joint capsule and the bony anatomy). Given the high failure rate of conservative management, early surgical intervention appears warranted for most cases of cranio-dorsal hip luxation.

Please feel free to contact the [surgical team](#) at VSS to discuss coxofemoral luxation or any surgical condition.

Thanks to [Dr Nick Cleland](#) for developing this article.

