

## Veterinary Medicine Teaching Hospital

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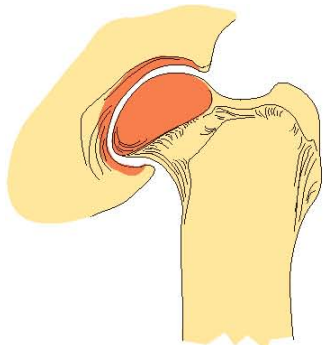


## Small Animal Orthopedic Surgery

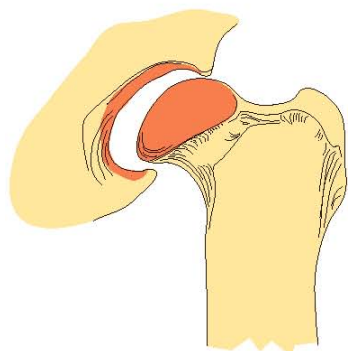
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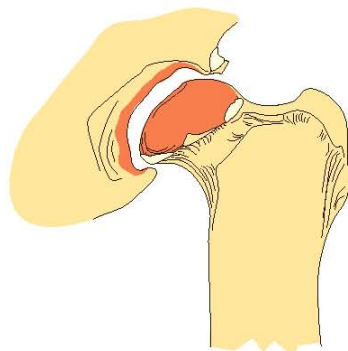
### CANINE HIP DYSPLASIA



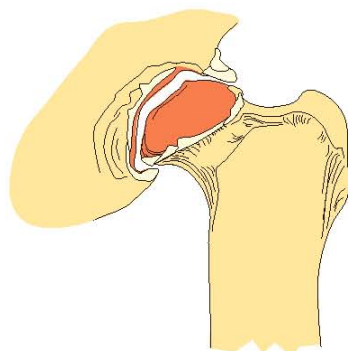
Canine Hip Dysplasia is a condition which starts in immature dogs with instability or loose fit of the hip joints. As the condition progresses, osteoarthritis of the hips occurs. Hip dysplasia has a hereditary basis. The pattern of inheritance is considered a polygenic or quantitative trait with expression determined by an interaction of genetic (heritability .25 to .40) and environmental factors (such as rapid weight gain as a puppy).



The clinical signs of hip dysplasia are lameness, reluctance to rise or jump, shifting the weight to the forelimbs, loss of muscle mass on the rear limbs, and pain when the hips are manipulated. Not all dogs with hip dysplasia show clinical signs. Dogs may show clinical signs at any stage of development of the disease. Many dogs are painful at 6 to 8 months but recover as they mature. As the osteoarthritis progresses with age, dogs may show clinical signs similar to people with arthritis such as lameness after unaccustomed exercise, lameness after prolonged confinement, and worse problems if they are overweight.



The recommended treatment for hip dysplasia varies with the age of the dog, condition of the hips, and severity of clinical signs. Immature dogs (less than one year) with loose fitting hips, but no arthritic changes can be treated with a pelvic osteotomy. This procedure involves cutting the pelvic bone in three places and rotating it to stabilize the hip joint and in many cases, prevents osteoarthritis. Immature dogs with osteoarthritis present will not benefit from this procedure and are treated medically as needed. Mature dogs with hip dysplasia that are not showing clinical signs do not need surgical treatment. These dogs should be kept slim and allowed consistent exercise to develop good muscle mass to support the hips. Mature dogs with occasional lameness can be treated with anti-inflammatory drugs. Prescription nonsteroidal anti-inflammatory drugs are available from your veterinarian. After the lameness subsides, a slowly increasing consistent exercise program and structured rehabilitation exercises, targeting the area of concern, should be instituted. If lameness recurs, exercise is decreased and the drugs are administered again. Every effort should be made to maintain the dog at a slim weight. Ideally one should be able to easily feel the ribs. In obese dogs, weight loss alone may alleviate clinical signs. When medical therapy does not provide pain relief and reasonable function, the dog is a candidate for one of two surgical procedures to reconstruct the hip joint. The femoral head and neck osteotomy involves removing the femoral portion of the hip joint. The joint heals with fibrous tissue and in many cases allows a more pain free existence. The total hip replacement involves replacing the hip joint with a metal and polyethylene prosthesis. This procedure results in the most



normal limb function in large dogs. The procedure is expensive because of the implants and the technical requirements of the surgery, and requires a commitment from the owners for follow up care.