Femoral Head and Neck Excision (FHNE) is a surgical procedure that is used to alleviate pain in the hip joint and return the patient to use of the limb by creation of a pseudoarthrosis or false joint. FHNE can be used to treat hip dysplasia, severe arthritis of the hip, hip fracture, avascular necrosis of the femoral neck or chronic luxation of the hip joint. FHNE works by the surgical removal of the femoral head and neck. A fibrous pad forms between the smooth base where the femoral neck once was and the acetabulum (hip socket). The hip muscles (the gluteals, internal obturator and gemelli muscles) which are left undisturbed, provide the support for the hip. (Figure 2). Post-op physical therapy and analgesic medication helps retrain weakened and tight muscles returning the patient back to a pain-free and functional use of the limb once again in the majority of cases.

Hip Dysplasia is a developmental condition in young dogs that starts as laxity in the hip joints. What should be a tight ball and socket type joint is loose. The irregular movement and abnormal stresses on the joint result in degenerative changes to the cartilage and underlying bone (Figure 1). Early symptoms include a reluctance to push off from or extend the hind limbs at the hip. Dogs with hip dysplasia have less developed hind limb musculature and are reluctant to jump up into a vehicle or on furniture. They often run with a characteristic “bunny hopping” gait where they use both hind legs as one unit. Or they may not want to run at all or quit playing early on due to discomfort.

Hip arthritis can be a result of hip dysplasia or chronic wear and tear on the joint in an extremely active, working or sporting dog or the result of abnormal stresses on the joint due to obesity. Untreated or malaligned fractures can also result in arthritis.

Avascular necrosis (Legg-Perthes disease, capitol physis epiphysiolyis) also occurs in young animals. There is a loss of the blood supply to the developing bone of the femoral neck. The bone collapses on itself and the femoral head is no longer supported or even attached in some cases to the shaft of the femur. The exact cause of this condition is not well understood.

**Figure 1. Hip dysplasia**

**Figure 2. Femoral head and neck excision (FHNE)**

Illustrations are reproduced from the following sources:
Figure 1 and 2: Novartis Animal Health “An Illustrated Guide to Orthopedic Conditions”