

## Femoral Head and Neck Excision Arthroplasty

*Excision arthroplasty, femoral head and neck ostectomy, femoral head and neck excision, and femoral head and neck resection* are all terms that refer to the removal of the head and neck of the femur for the relief of pain. The femur (large bone of the thigh) and the pelvis meet to form the hip joint, one of the most important joints in the body. Articular cartilage covers the bony surfaces enclosed within the joint capsule or joint cavity. For optimal locomotion and function it is crucial that these surfaces are congruous (well fitted to each other). Several conditions can affect the hip joint in such a fashion that the joint does not move freely or in a pain free manner. This will result in lameness.

Excision arthroplasty is the surgical removal of the head and neck of the femur bone. This procedure is used to eliminate joint pain. During surgery the head section of the femur bone (the ball of the ball and socket joint) is exposed before the head is removed using a small saw or a bone hammer and chisel. Sometimes a powered air saw is employed.

Unlike a hip replacement surgery, the head of the femur is not replaced. The gap between the top of the femur and the pelvis is allowed to heal and develop its own fibrous scar tissue. The result is that the joint no longer has any painful bone-to-bone contact. A pseudoarthrosis (also called a "false joint") is ultimately formed. The neck of the femur is usually removed at the same time as the head. This prevents the post operative complication of bone rubbing on bone and continued pain.

Results are consistently better in smaller dogs that are less than roughly 18 kg, and those with good hip musculature. Following the procedure joint pain is eliminated; however, a slightly abnormal gait often persists. Excision arthroplasty is primarily used as a salvage procedure when significant degenerative joint disease is present and pain cannot be controlled medically.