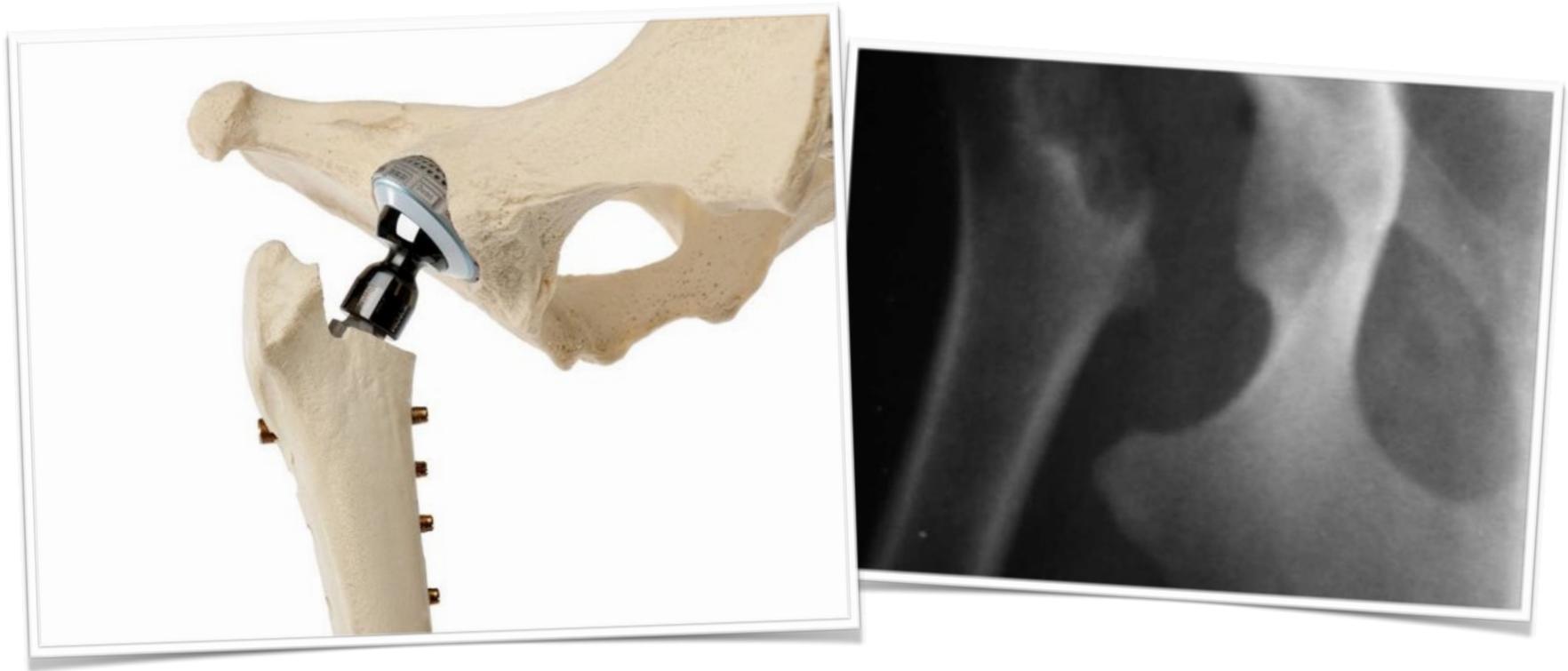


Hip Salvage

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INTRODUCTION

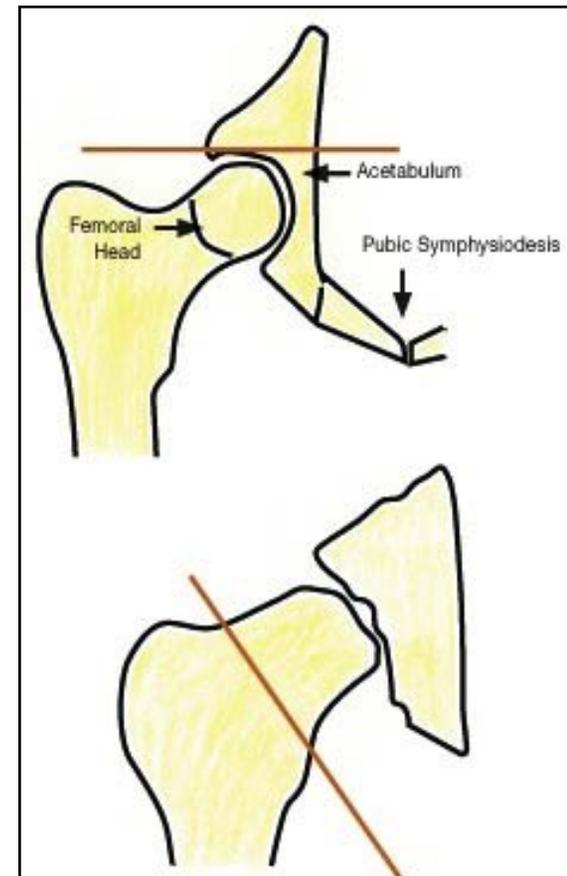
The hip is a "ball and socket" type of joint. In the normal dog and cat, the head of the femur, femoral head (the "ball" portion) sits tightly into the acetabulum of the pelvis ("socket" portion).

In cases of disease, irreparable fractures, or the advanced stages of crippling osteo-arthritis (secondary to an old injury or hip dysplasia), surgical procedures may be required to salvage pain free use of the affected leg.

EXCISION ARTHROPLASTY

One such salvage procedure is called Excision Arthroplasty or Femoral Head Ostectomy (FHO). In this procedure, one part of the arthritic hip joint, the femoral head (the "ball" portion), is cut and removed. This is known as excision or ostectomy. The joint is then reconstructed with regional muscles and tendons so that the patient can use the leg without pain (arthroplasty).

Heavy animals do not do as well with this procedure, thus we prefer to limit this surgery to patients weighing less than 40 pounds or in dogs requiring a revision due to a complication of a total hip replacement. Smaller patients can usually be expected to have up to 80% of normal leg usage. The success of this procedure is largely dependent on the pet's size and the owner's willingness and ability to perform physical therapy exercises. Slow leash walks up slopes and stairs as well as range of motion exercises are necessary 2-3 times per day.



TOTAL HIP REPLACEMENT

In dogs greater than 45 pounds, especially large, active, athletic dogs, we strongly recommend Total Hip Replacement (THR) to salvage pain free use of the leg. This procedure not only involves precision removal of both sides of the abnormal hip joint, but also reconstruction and replacement of the entire hip joint using a stainless steel/titanium ball and plastic/teflon cup. The prostheses (implants) may be cemented or screwed (non-cemented) into place.

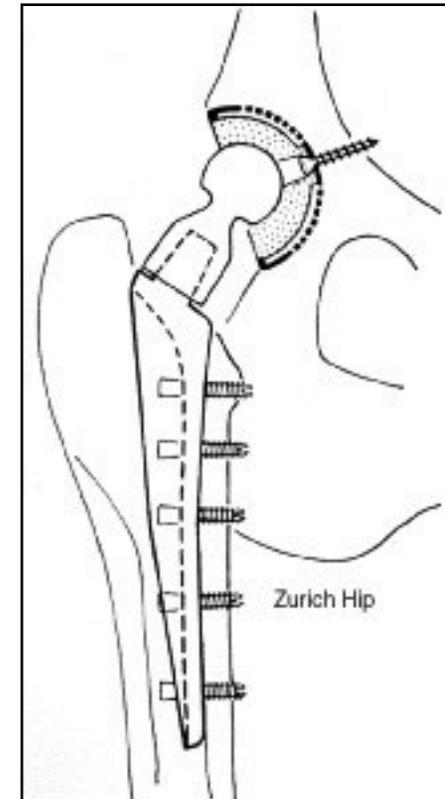
The non-cemented prosthesis may be the more suitable system for many dogs especially very young dogs needing a Total Hip Replacement.

Patients begin to place weight on the leg within days of surgery! Crate and pen confinement is required for 8 weeks. When they are out of the pen or crate, leash control is required. A sling may be required to support their weight during short walks to urinate and defecate.

Patients can generally begin to return to normal activity after 6 weeks of strict rest. Some control of activity is required for 6 months. If both hips need to be operated, the second side is generally staged 4-6 months after the first.

Radiographs are required at 6 weeks, 16 weeks and 1 year after surgery. Annual radiographs are then indicated. Radiographs do require sedation or light general anesthesia.

Dislocation of the artificial hip joint is the most common immediate post-operative complication. It is a devastating complication and most likely occurs within the first six weeks after surgery, generally when



patients slip and fall. Thus, dogs must be confined to a crate/pen, slippery surfaces must be avoided and leash control enforced for 6 weeks.

In patients with a hip prosthesis, infection of the implant is another serious complication. Complete physical examination and laboratory tests are performed to screen for any underlying infections within the body prior to surgery. In addition, extra precautions are recommended in the future when routine procedures such as prophylactic dentistry are performed.

The most common complication associated with the Total Hip Replacement is loosening of the artificial prosthetics over the years. This loosening may occur within 5-7 years following surgery and is a cause of progressive lameness and pain.

Many complications including dislocation, loosening or breakage of the implants require additional surgeries such as revision or explantation (removal and conversion to an excision arthroplasty.)

The Total Hip Replacement procedure is very successful in allowing dogs to regain a normal life without the pain of chronic hip arthritis.

This highly specialized procedure can only be performed at a few referral centers on the west coast. The Veterinary Medical and Surgical Group is one such facility.

PHYSICAL REHABILITATION

Certified Canine rehabilitation Therapists (CCRT) are the Physical Therapists of the veterinary profession. CCRT guided exercises and treatments, such as low level therapeutic laser can improve the outcomes with surgery.

Your pet's surgeon can advise you on which techniques may be best for your pet.

ABOUT THE AUTHOR

*Dr. Kenneth Bruecker, DVM, MS, DACVS, DACVSMR
Board Certified Veterinary Surgery
Board Certified Veterinary Sports Medicine and Rehabilitation*

A San Fernando Valley native, Dr. Bruecker attended Pierce College then received his bachelors degree in Animal Science from the University of California at Davis.

He graduated from the University of California at Davis, School of Veterinary Medicine in 1983. After one year of general small animal practice in San Fernando, Dr. Bruecker completed an additional year of clinical internship at the West Los Angeles Veterinary Medical Group. He received his master of science degree at the completion of a three year surgical residency at Colorado State University and moved back to Ventura County in 1988 to establish specialty veterinary care. Dr. Bruecker is Founder, Medical Director and Chief of Surgery at the Veterinary Medical and Surgical Group in Ventura, California. He also provides consulting and training services throughout the world.

Dr. Bruecker provided regular surgical support for practices in the state of Hawaii from 1996 through 2011.

In 2015, Dr. Bruecker founded Continuing Orthopedic Veterinary Education (COVE), a company whose mission is post-graduate veterinary orthopedic education, training, mentoring and surgical coaching around the world.

Board Certified in Surgery since 1990, Dr. Bruecker's primary clinical interests are spinal surgery, sports medicine/orthopedics (including arthroscopy, TPLO, TTA, and limb deformity correction), minimally invasive surgery (such as laparoscopy) and peri-operative pain management. He is well respected for his expertise in arthroscopy, limb deformity, disorders of the knee, fracture management and disorders of the spine. He has authored numerous articles and book chapters on Wobbler syndrome, treatment of

intervertebral disk degeneration and spinal fracture management. He is an active participant in working groups on elbow dysplasia, shoulder injuries, advanced techniques in small animal arthroscopy and cranial cruciate ligament repair. Dr. Bruecker was the first to offer TPLO surgery, TTA surgery, cementless hip replacement, arthroscopy and laparoscopy to owners of pets in Ventura, Santa Barbara and San Luis Obispo Counties, as well as to the State of Hawaii. He holds a patent for the first locking Triple Pelvic Osteotomy plate used to treat hip dysplasia. He has been an innovator in the development of many new surgical techniques and orthopedic implants.

Dr. Bruecker became a Diplomate of the American College of Veterinary Sports Medicine and Rehabilitation in 2015 and thus is now Board Certified in this field, as well as surgery.

Dr. Bruecker is a past program chair of Neurosurgery for the American College of Veterinary Surgeons and a past program chair for the veterinary technician program for the American College of Veterinary Surgeons. He served as the orthopedics program director for 2004 and 2005 for the American College of Veterinary Surgeons. He was also program director for orthopedics, pain management and anesthesia for the 2006 American Veterinary Medical Association annual symposium. He has served as the program chair for the Association for Veterinary Orthopedic Research and Education (AVORE). He is a past Executive Board Member (2004-2007) and is Past-President (2014-2015) of the Veterinary Orthopedic Society.

Due largely to his commitment to education and training, Dr. Bruecker was chosen as the Veterinarian of the Year by the California Veterinary Medical Association in 2004. He is an invited speaker and educator throughout the United States, Latin America, South America, Europe, Asia and the South Pacific on a variety of topics in orthopedics (fracture management and arthroscopy), neurosurgery and pain management. He splits his time between global veterinary education and clinical practice.

Dr. Bruecker and his family farm avocados and citrus in Ventura County. He is an enthusiast of classic cars.