PET OWNER SERIES

SALVAGING A BAD HIP: REMOVAL MAY BE THE BEST OPTION (FHO)

Overview—"I don't understand what an FHO procedure is; please help me understand the condition and the treatment."



The Femoral Head Ostectomy (FHO) involves the surgical removal of the head and neck of the femur (thigh bone). It takes away one "side" of the hip joint, the ball; the socket remains (the acetabulum portion of the pelvis). The concept is to create a pseudarthrosis (false joint) that is made up of heavy scar tissue and muscle acting as a sling supporting the hip region and allow for close-to-normal leg use.

The surgery is achieved through a small incision on the side of the rump area. The head and neck of the femur are removed, and the joint capsule and other soft tissues of the region are closed over the site.

"Why is this procedure being recommended for my pet?"

The FHO is typically recommended for patients with hip injury or disease that has a poor prognosis with other treatments and/or when other treatments are too costly or carry undesired risks or postoperative requirements. Usually these conditions include: femoral head/neck fracture; growth plate injury of femoral head; disturbance of blood supply to the femoral neck (necrosis of femoral neck); chronic hip dislocation.

An FHO can provide a high level of leg function even when severe injury has damaged a hip. **Rarely** does the outcome of an FHO result in normal hip function; **usually** it results in a hip region that is slightly stiffer than normal, that causes a shorter leg stride than normal, and that exhibits some degree of pain when overworked in the course of a pet's lifestyle. A **small percentage** of patients will not become comfortable with their FHO hip region, and poor leg use is the outcome.

"What options do I have to treat my pet's problem?"

If the FHO is being recommended for treatment of a <u>hip fracture</u>, other options may include surgical repair of the fracture.

If the FHO is being recommended for treatment of a <u>hip dislocation</u>, other options include surgical replacement and stabilization of the hip dislocation.

If the FHO is being recommended for treatment of <u>femoral head necrosis</u> (Legg-Calves-Perthes disease), other options include medical management with pain medications and the passage of time.

If the FHO is being recommended for the treatment of hip arthritis/DJD, other options include medical management (weight loss to lean-ideal condition, joint supplements, high-dose fish oil supplements, joint injections, pain medications; hip denervation surgery; total hip replacement surgery. (See add'l information: www.directvetsurg.com)

All of these scenarios have unique patient-dependent data that shape the prognosis for outcome with each therapy option. A discussion with your veterinarian and surgeon will help you balance the risks and benefits during your decision-making process.

"What postoperative complications do I need to know and understand when considering this surgery?"

PET OWNER SERIES

When performing the FHO, an extremely rare complication is the development of a femur fracture below the hip region. If this occurs during the procedure, the fracture can be stabilized at that time.

Postoperatively, complications include:

- A difficult and/or painful anesthetic recovery which may require additional medications or rehospitalization for support.
- Incisional infections, usually from patient self-trauma and licking; these are typically minor and may require oral antibiotics. These infections may worsen to include incision separation (dehiscence) that may require minor surgical assistance to re-close the incision.
- All surgery procedures require general anesthesia which carries with it the risk of serious harm or death. This risk is extremely rare, but obviously catastrophic. The risk should not be taken lightly; it is very uncommon and must not prevent us from using surgery and anesthesia to help our patients when necessary and appropriate.

"Are there situations when the surgical outcome is not what we hoped it would be?"

During the immediate recovery period, if pain is not controlled well, the patient will not walk on the operated leg. Without consistent use, the scar tissue "false joint" will be very tight and restrictive as it heals. Long-term, this will result in a very tight hip range of motion and minimal (or no) leg use. It is important to use all pain medications provided for the full duration (minimum 3wks typically) and **remain in open communication** with your veterinarian and surgeon if leg use does not show steady improvement <u>after the first week</u> postoperatively.

Similarly, without consistent home or professional physical therapy and activity (pet "self" PT), the healing false joint (scar tissue) will be too tight and limit hip range of motion long term. In patients with a lot of thigh atrophy before surgery (from a long duration of preoperative lameness), the postoperative physical therapy efforts usually **need to be more proactive** to regain the leg muscle that has been lost. This can take much longer to achieve (months).

Highly agile toy breeds, especially those with a chronic lameness, have **higher than typical postoperative poor leg use**. They are so good at and so used to not using the bad leg, they will continue that routine postoperatively when additional surgical pain is present. These patients will require very good pain management and diligent physical therapy (home and/or professional) to resume good leg use after an FHO.

In cases with other fractures of the hip region, chronic hip injury or severe preoperative muscle loss, there can be ongoing bony contact between the femur and pelvis. This rubbing may result in a persistently painful surgery site and may benefit from re-operation to improve the false joint stability.

"How is my pet's life and lifestyle likely to change after this procedure?

The FHO procedure is unique in the orthopedic surgery world. We WANT patients to use the leg very soon postoperatively. Minor restrictions with no rambunctious activities for two weeks allow the soft tissues to heal without complication. After that, we rely on full activity during the entire healing period (10-12wks) for false joint scar tissue to develop in a "stretched out" pattern allowing full range of hip movement. Extension of the hip is usually what is lacking and is improved with running, jumping, and heading up stairs. Covering the postoperative pain aggressively for a minimum 3wks will improve the likelihood your pet will do her/his own "self-PT" most effectively and will allow you or a physical therapist to help along the recover.

Recovery timeline:

Week 1—holding the leg up

Week 2—occasional toe touch for walking or support when standing

PET OWNER SERIES

Week 3-4—toe touch most of the time when walking; holding leg up when moving quickly, using stairs, etc. Week 5-6—foot on the ground majority of the time with strong weight bearing; holding leg up occasionally when moving quickly.

Week 7-8—foot on the ground all of the time with noticeable limp.

Week 9-12—foot on the ground all of the time, limp less noticeable; stiff limp after resting that "warms up" with movement.

The typical expectation for a fully healed FHO is one of minor disability. A visible difference in the leg length and walking/running gait is common. Rarely is the hip pain-free to a normal range of motion, but the leg can become highly functional and pain minimal through a functional use. As the size of the patient increases, the strength and support of the FHO hip region typically becomes less supportive for highly athletic activities. A well-motivated, athletic, and agile patient with dedicated owners can surpass typical expectations. Older, more sedentary patients can have a difficult and prolonged recovery to satisfactory legfunction.

"Are there things I can do to prepare myself, my home and/or my pet for this procedure?"

Orthopedic surgery will interfere with your pet's ability to walk well over the first few days. She/he will need assistance getting in/out of the car, into the house, out to got to the bathroom, up the stairs, etc. Depending on the size of your pet, you may need additional help with these activities from family or friends.

There are off-the-shelf "sling" products that can help you help your pet when they don't have full strength in all of their legs. See www.directvetsurg.com "Pet Links" for some product recommendations for this scenario.

Slippery floors can be a challenge for postop orthopedic patients; secure runners and area rugs for problem spots can help, as can non-slip booties for your pet's feet. See www.directvetsurg.com "Pet Links" for product recommendations.

Outpatient surgery and anesthesia can be uncomfortable, painful, disorienting, and frustrating experiences for animals; watching your pet work through the early postoperative period and recover from anesthesia and pain medications can be worrisome, scary and frustrating for pet owners. The vast majority of the time this period of difficulty is brief, and *your pet is actually more comfortable and secure at home with you*. Sometimes it doesn't feel like that at two in the morning when your pet is anxious and not consolable, and you are unsure of what to do. You always have the option of transporting your pet to a 24-hour veterinary facility postoperatively. If you do not want to have your pet home in the first few days postoperatively, please advise your primary care veterinary staff. They will provide contact information for a local 24-hour veterinary facility and help get an estimate for the ongoing care.

It is important that you have proper expectations about this procedure; your experience and you pet's outcome will benefit greatly. Please discuss this information with your veterinarian when working through the decision-making process regarding the **Femoral Head Ostectomy (FHO)**.

Lara Rasmussen, DVM, MS
Diplomate, American College of Veterinary Surgery
DIRECT VETERINARY SURGERY, LLC

(See additional materials at www.directvetsurg.com for pet owners and veterinary professionals.)