

## SHOULDER OCD:

It's just a blister in an odd location



**Overview—“I don’t understand what OCD is; please help me understand the condition and the treatment.”**

The dog shoulder is made up of the head of the humerus (upper arm bone; the “ball”), and the cup of the scapula (shoulder blade; the “socket”). Osteochondrosis in the dog shoulder starts in the bone underlying the cartilage on the back of the humeral head. The bone stock in a small cavity is poor, and a weak spot results. The overlying cartilage is not supported physically or nutritionally; a “blister” results. Depending on the size and location of the blister and the activity of the dog, this blister may pop. Up until that moment, *osteochondrosis* was not painful and did not cause a limp; no treatment was needed.

Once the blister pops, you have *osteochondritis dessicans (OCD)*. The “-itis” is the key...inflammation = pain.

Once the blister pops, there is a flap that bangs around on the crater site and doesn’t let it fill in with “bandaid cartilage” (i.e. fibrocartilage). The flap also can break loose, float free in the shoulder joint, and get into trouble up in the biceps tendon sheath.

Why this bone/cartilage blister develops in puppies is likely unknowable, but there is enough data to support a strong genetic contribution. It is recommended the owners of parent breeding stock be made aware of a puppy’s OCD diagnosis. Nutrition and activity probably have some contribution as well.

**“Why is this procedure being recommended for my pet?”**

Surgical removal of the OCD free cartilage flaps is generally recommended. This removal speeds up healing of the blister site, and prevents future problems associated with a large free-floating flap acting like a “rock in your shoe”. Some patients will develop degenerative joint disease (DJD; “arthritis”) very slowly over time, although this does not appear to be a significant cause of lameness in these patients. Patients generally return to normal leg performance without lifestyle restrictions after the healing period.

**“What options do I have to treat my pet’s condition?”**

Surgery can be performed via several different techniques; these techniques vary based on surgeon preference/experience, location of the “blister”, and available equipment. The common components of the surgery are to explore the joint, remove the blister “flap” and tidy up the blister site to promote fast healing with “bandaid” cartilage.

A conservative/non-surgical approach is always an option. This can have good outcomes if the blister and flap are small; the challenge is determining the size and status of the OCD site. X-rays help us confirm the diagnosis but are not sensitive enough to characterize the cartilage flap (cartilage cannot be seen on plain x-rays). Often the diagnostic tools that allow us to look closer at the site require

general anesthesia and additional costs. The results of these tests (CT, dye study, scope) have not been scientifically evaluated to link results with prognosis (surgical vs. non-surgical). The risk:benefit analysis is not strongly in favor of using these tests for surgical decision-making (although, we may use these same tests to confirm an OCD diagnosis if plain x-rays are not clearcut.)

**“What postoperative complications do I need to know and understand when considering this surgery?”**

It is not uncommon for a seroma to develop under the incision; this is a pocket of normal tissue fluids that develops in a high motion area such as the shoulder joint. Warm compresses and time are usually all that is needed for treatment.

Temporary nerve palsy can result from surgical manipulation of the nerves around the shoulder joint; this is quite rare and typically minor.

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

In some cases, a large free flap will have broken loose by the time of surgery and migrated out of easy reach (commonly into the biceps tendon sheath, which is connected to the joint). If a blister “crater” is confirmed but a flap is not found, options after cleaning up the crater are to extend the shoulder joint exploration or not.

The benefit of continuing to search for the flap is, if found, future concerns for flap-related problems are eliminated; the draw back of continuing the search is the added surgical disruption to the joint (prolonging healing and recovery time.) Some flaps do break up and get cleaned out by normal joint processes when they are small (as mentioned above.)

Full return to function is most common. Arthritis can develop over time but is rarely a significant limitation to high quality leg use and comfort in the shoulder joint.

**“How is my pet’s life and lifestyle likely to change after this procedure?”**

The defect on the joint surface will fill-in with new cartilage very similar to the cartilage that normally covers the joint; the surface will again be smooth and the joint pain-free.

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

Your dog will have a very significant postoperative lameness. If surgery is performed on both shoulders at the same time, s/he will have trouble walking for 1-2 weeks. Helping them with their mobility will be necessary. A well-fitting forequarter/chest harness with a handle (designed for assisting dogs, not just for leash use) is strongly recommended to allow for liberal support/assistance during postoperative rehabilitation.

**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 **OCD of the shoulder joint**.

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