

Hurray for OFA!

Matthew Townsend, Kennel di Sforzando

The Orthopedic Foundation for Animals (OFA) works to combat hip dysplasia (HD), a terrible genetic disease. HD is known to cause various degrees of arthritis (degenerative joint disease) that can lead to pain, debilitation, and, eventually, euthanasia. LCA Breeders are currently required to evaluate the hips of all breeding stock and eliminate dysplastic dogs from the breeding programs. Many breeders, working to eliminate HD from their lines and from the breed, ask puppy buyers at the time of adoption to evaluate the hips of their new puppies at some point before two years. Many puppy owners fail to do so because they don't understand the true nature of the disease, the importance of the data to a breeding program, or because they fear anesthesia. Let's take a moment to address these issues.

HD is an inherited, genetic condition. An unfortunate myth in the dog world is that HD is caused by a combination of diet, environment, and genetics. In truth, "hip dysplasia is a multiple gene, inherited disease. Environmental factors, like high caloric diet during the rapid growth phase, may exacerbate changes in dysplastic hips but will not create hip dysplasia."¹ HD, the structural failure of the femoral head to seat into the hip socket, is programmed from birth- just as the color of your leo's face or the length of their tail. The symptoms of HD may manifest faster due to trauma or improper diet, but trauma and diet don't cause the genetic condition. HD is often present in leonbergers years before symptoms appear and many owners are oblivious to the condition.

HD can be eliminated from leonbergers. Clubs, like the LCA, who have recognized the dangers of HD and instituted breeding practices to eliminate unsound candidates, have found remarkable success. In twenty years, the LCA Breeders have reduced the incidence of HD in the breed to 10% and, at the same time, increased the occurrence of Excellent hips by over 60%. In contrast, the St. Bernard, which is relatively unscreened for HD, suffers from nearly 50% hip dysplasia in the screened and submitted stock.² The incidence of HD in the St. Bernard may even be much higher. In order for leonberger breeders to make further progress, we need not only to screen for three generations of HD free dogs as we do now, but also know more about the genetics of our breeding stock.

Breeders can only see half the genetic picture. Genes are like cards in a two-player game of "Go Fish". Breeders try to do the best they can to know all the cards out there, but typically they can only see half the cards at play. Naturally, they end up doing a lot of educated guessing. When puppy owners perform health tests, including hip evaluations, they aren't only easing their own minds, but they are giving their breeder a sneak peak at some of those unseen genes. The guidelines for us to further reduce HD in leonbergers are very clear, but breeders need your help to follow the OFA's recommendations for leonberger breeders:

- Breed leos with normal hips to other leos with normal hips.
- Breed leos normal hips to leos with a history of normal hips.

Breed leos from litters with a low incidence of dysplasia.
Replace leos in breeding programs with leos whose hips are better than average.³

What we see isn't always what we get. Illustrating how important litter screenings are, OFA evidence clearly demonstrates that a dog with fair hips and a strongly normal hip background is typically a far superior candidate to a dog with excellent hips, but a weak hip background.³ A breeder without information on brother and sisters and/or offspring isn't able to fully evaluate the "genetic health" of their dog's hips and can only go on hip rating and muscular traits. One animal's hip rating is only half the picture; breeders must know the whole picture. They are counting on you for help to make this breed as sound as possible.

You can safely get an OFA hip x-ray. The older, less predictable anesthetics of years ago have been replaced with compounds that are very predictable and safe when used properly. Luckily, the days of old where a small mathematical error could lead to the death of your leonberger have passed us by. Anesthesia, when properly administered by a veterinarian, is probably safer than taking your dog for a ride in the car. You can even go "the extra mile" to be sure your leo is at virtually no risk by requesting a blood panel performed to check organ health. Ask your vet about the risks of modern anesthesia.

Take action. Now that you've decided to allow your leo to contribute to future generations and have your pet leonberger become a documented member of the gene pool, what do you need to do? All you need for your OFA x-ray is your LCA pedigree, your leonberger, and an appointment at a vet who knows the procedure; your vet should have the paperwork. The vet will give you instructions for the care of your dog prior to the vet visit. Shortly after your leo gets home, you'll be able to go on an evening walk/romp. Let your breeder know you've done the procedure, put the results in the open database, and share the results with your LCA Breeder. Chances are, they'll be thrilled!

Learn More This information is just the tip of the iceberg. Learn more about HD at <http://www.offa.org>. After you've gotten your OFA examination, tell others how easy the process was. Look at other diseases the OFA is working to combat and ask if you'd like to arm the leonberger community with information about your leo. Check the health databases with your leo's pedigree and learn about the health of their family tree. Once you've read up, share your knowledge and experience with others.

1. <http://www.offa.org/faq.html>
2. <http://www.offa.org/hipstatbreed.html?view=2>
3. <http://www.offa.org/hipguide.html>