My Dog Failed Its O.F.A. Hip Evaluation!!!.....Really???

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The Orthopedic Foundation for Animals (O.F.A.) is recognized nationally and internationally as an authority in the evaluation of dogs for hip dysplasia. This evaluation is recognized by most official breeds as the final judgment on whether a dog is free from hip dysplasia and, therefore, acceptable to breed; or whether the dog has hip dysplasia and should be removed from a breeding program. Dogs with hips determined to be free of hip dysplasia can receive O.F.A. grades of excellent, good or fair; it is from this group of passing dogs that breed clubs recommend selecting breeding bitches or stud dogs.

Unfortunately, not all dogs are free from hip dysplasia. For those showing evidence of hip dysplasia, such as remodeling of the femoral head or neck, the grades given by the O.F.A. will vary depending on the severity of the disorder and include borderline, mild, moderate and severe dysplasia. It is recommended that dysplastic dogs be removed from breeding programs in order to avoid passing the disorder on to future generations.

But what happens if an evaluation is inaccurate? After being in practice since 1973 and doing 200-400 O.F.A. hip x-rays a year, I began to see an increasing number of owners and/or handlers telling me a dog had received a failing O.F.A. grade yet the dog showed no signs or symptoms and its line had no history of the disorder.   When I took new x-rays of some of these dogs and submitted them to O.F.A., a majority subsequently received passing grades.

I then began to follow these dogs closely, looking at the previous failing grade, the reason for failing and the grade the dog then received upon submission of new x-rays. In a study ranging from June 14, 2010, to May 24, 2014, I submitted hip radiographs to the Orthopedic Foundation for Animals (O.F.A.) on 163 dogs that had previously received failing grades of moderate hip dysplasia, mild hip dysplasia and borderline. The result was that 104 of the submissions passed with grades ranging from fair to excellent.

This may be hard to believe but it is true!

Based on this multi-year study involving a total of 200 dogs, it seems apparent that a high level of skill is required of the practicing veterinarian in order to obtain the optimum O.F.A. hip grade for the dog being x-rayed.

The goal is to reflect the "true anatomy" of the dog being x-rayed. This, in turn, protects the breeding program and financial investment in training, campaigning and breeding that dog. If the dog is truly dysplastic, an appropriate decision can be made. But if a dog is diagnosed as dysplastic only because of

subluxation and/or shallow acetabulums, further evaluation is indicated. In my study, 63.8% of the non-passing dogs went on to successfully pass their O.F.A. evaluation with fair, good or excellent ratings after being x-rayed again with strict adherence to O.F.A positioning guidelines.

Here is what I see in the real world. When a dog fails its O.F.A. hip evaluation due to subluxation or shallow acetabulums only, it truly needs to have follow-up evaluations by a veterinarian very familiar with the fine nuances of correct anatomic positioning per the O.F.A. guidelines.

The prescribed position per O.F.A. is as follows:

"In this standard hip extended position (ventrodorsal view), the animal is placed on its back with the pelvis symmetrical, both femurs extended and parallel, and with the stifles (knees) rotated internally placing the patellas (knee caps) on the midline. The radiograph should include the last two lumbar vertebra and the stifle joints. It is essential, particularly in marginal cases, to obtain proper position and radiographic technique."[1]

This position is endorsed by the American Veterinary Medical Association and the American Animal Hospital Association.   Below is an x-ray that is relatively close to this positioning. This dog received an O.F.A. excellent score.

Failing to have the pelvis level can cause the appearance of subluxation (the ball not being deep enough in the socket on one or both sides). The tilt can also cause the appearance of a shallow

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[1]Greg Keller, *The Use of Health Databases and Selective Breeding: A Guide for Dog and Cat Breeders and Owners,* 5th edition (Columbia, MO: Orthopedic Foundation for Animals 2006), 16-17.

acetabulum (socket). The socket should look like a tightly curved letter "C" that curves over the femoral head (ball). A shallow acetabulum looks more like a parenthesis "(", showing less curve.

Now, let me dispel false hope. If a dog has remodeling of the femoral head (ball), remodeling of the femoral neck (connects the ball to the femur) or osteophytes (arthritic calcium deposits), the dog is truly dysplastic.

The situation in question is this: did the dog fail <u>only</u> due to subluxation and/or shallow acetabulums? If your dog failed due to these reasons, we need to closely evaluate the positioning of the dog in the x-ray. Did it fail due to x-ray positioning or does it really have hip dysplasia?

Here is a comparison of x-rays of the same dog as verified by microchip. The first image is the digital x-ray submitted to O.F.A. by the original veterinarian and provided to the owner. The second image is the film taken at my office and submitted to O.F.A. Which x-ray more closely conforms to the O.F.A. guidelines? Both were accepted and read by O.F.A. and issued official grades. The dog in the x-rays was evaluated as mildly dysplastic based on the original x-ray done elsewhere but received a grade of good when the re-positioned x-ray I took was submitted to the O.F.A.

original x-ray: mild

resubmitted x-ray: good

I collected data on 200 dogs from June 14, 2010, to May 24, 2014. These dogs all had previous x-rays accepted by O.F.A. and official hip grades reported; then I did follow-up x-rays on the same dogs which were also submitted to, and graded by, the O.F.A. Of the dogs x-rayed in this study, 163 had previously received non-passing grades of borderline, mild hip dysplasia or moderate hip dysplasia. An additional 35 received grades of fair while the final two had received grades of good. Table 1 shows the breakdown of results received on the 163 dogs that had previously received failing grades.

Table 1

Original OFA Grade	---------------------------------- Resubmission Grades--					
	Moderate	Mild	Borderline	Fair	Good	Excellent
Moderate hip dysplasia 13 dogs	2	7	0	1	3	0
	15.4%	53.8%	0%	7.7%	23.1%	0%
						30.8% Passed
Mild hip dysplasia 130 dogs	7	39	2	34	45	2
	5.4%	30%	1.5%	26.2%	34.6%	1.5%
						62.3% Passed
Borderline 20 dogs	1	0	0	7	10	2
	5%	0%	0%	35%	50%	10%
						95% Passed

A total of 163 dogs had received failing grades on their previous O.F.A. hip evaluations with moderate, mild or borderline hip dysplasia, and of those, 104 went on to pass when new films were taken and submitted. That's 63.8% of previously failing dogs that went on to pass using the Precise Positioning Technique®.

These results underline the critical importance to breeding programs, individual dog's potential breeding careers and the financial investment of dog and kennel owners to know with certainty if a dog is truly dysplastic. The big question becomes: Is my dog REALLY dysplastic or did positioning mask my dog's true anatomic structure? According to *The Use of Health Databases and Selective Breeding: A Guide for Dog and Cat Breeders and Owners*, a publication of the O.F.A.,"It is essential, particularly in marginal cases, to obtain proper position and radiographic technique."[2]

This is all rather startling data. If this is happening to dogs receiving failing grades, could the same thing be happening to those dogs receiving grades of fair or good? It is not uncommon to hear owners say "this bloodline always has good or excellent hips, why did I get a fair?" Additional data from this study has shown these grades can often be improved as well. Of the 200 dogs in the study, 35 had previously passed with an O.F.A. grade of fair while an additional two had results of good. Table 2 shows the breakdown of results received on the 37 dogs that had previously received passing grades of fair or good.

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[2]Greg Keller, *The Use of Health Databases and Selective Breeding: A Guide for Dog and Cat Breeders and Owners,* 5th edition (Columbia, MO: Orthopedic Foundation for Animals 2006), 17.

Table 2

Original OFA Grade	Resubmission Grades					
	Moderate	Mild	Borderline	Fair	Good	Excellent
Fair	0	1	0	3	27	4
35 dogs	0%	2.9%	0%	8.6%	77.1%	11.4%
						88.6% Improved
Good	0	0	0	0	0	2
2 dogs	0%	0%	0%	0%	0%	100%
						100% Improved

How important is it to top-level show dogs and breeding programs to have a good or excellent O.F.A. hip score instead of fair hips? It seems that a dog's value escalates dramatically the better the O.F.A. hip grade.

I have seen the O.F.A. hip grades of many dogs improve since 1978 using the Precise Positioning Technique® and adhering to the O.F.A.'s positioning standards. It is my hope that changes can be put in place at the O.F.A. that will assure dog owners, fanciers, handlers and breeders receive a hip grade based on the dog's true anatomy. Breeding programs and significant financial investments depend on anatomically accurate positioning for O.F.A. hip evaluations.

References

Keller, Greg. *The Use of Health Databases and Selective Breeding: A Guide for Dog and Cat Breeders and Owners*. 5th ed. Columbia, MO: Orthopedic Foundation for Animals, 2006.