## ICHTHYOSIS-FISH SCALE DISEASE

In the grooming industry, we are often presented with pets that have questionable skin issues and unfortunately, we are not always aware of the source or how to approach the problem. Ichthyosis or "fish scale "disease is one of these oddities that you may be faced with. On presentation, there is an excessive amount of shedding of flakey scale like dander. The more we groom these dogs, the more we come to realize that the basic problem does not seem to be eliminated. The owner complains that the same debris is all over the house, even finding "piles" of it where the dog lies. If you are faced with one of these cases, it is time to accept that you might be dealing with ichthyosis.

Ichthyosis is considered a congenital disease where the skin cycle, which is normally around 21 days, may be as short as every 3-4 days. This leads to excessive shedding of the skin cells and sebum. Ichthyosis is most often found in Golden Retrievers, Jack Russels, Westies, Dobermans, Norfolk Terriers, Cavaliers, Yorkshire Terriers, Soft Coated Wheatons and American Bulldogs. A majority of those affected will show signs shortly after birth, however, in some cases, it is not obvious until 3 to 4 years of age.

In many of these breeds, in addition to the "fish scaling", we will also notice black skin most likely associated with melanin being laid down due to chronic irritation. This irritation can often progress into cracked skin and sores (Westies and Yorkies). In some cases, there will also be thickening in the callus of the nose and footpads, alopecia (Westies), crimpy coat (Cavaliers) and dry eye (Cavaliers). In Goldens, the first signs maybe as subtle as increased pigment on the abdomen as a puppy. Most cases of ichthyosis are diagnosed by observation, but some will require a biopsy to confirm. For some of the breeds there is genetic testing available to identify affected individuals and also those that are carriers.

The unfortunate reality of a disease process like this, is that many of these dogs will be euthanized either due to the severity of the disease or the lack of understanding as to how to deal with it. As a groomer, if you recognize and understand the issue, you may be able to save a dog's life. First, we must accept that this is a lifetime issue. Ichthyosis is not going to be cured or miraculously go away, therefore, we have to work with the owner on a long-term plan. The plan that we implement should be based on the severity of the case when we begin. By the time we see these dogs, many of them have an infection, a lot of debris, and their skin is extremely dried out. In these cases, we should break the process into different stages. The first stage is to treat or get rid of any infection. Secondly, we need to hydrate the skin and replace the sebum. The third stage is to maintain the skin after we have it back to a semi-normal state. The first and second stage often go on simultaneously, but both must occur. In many cases, veterinarians prescribe chlorhexidine which will take care of the infection, but they do not recommend a hydrating conditioner. Conditioner is absolutely needed to replace the sebum. Without it, we usually see a relapse of the infection. This is one of the reasons our clients come back without ever getting to the maintenance stage.

## THREE STAGES FOR SUCCESS

- 1) GET RID OF INFECTION
- 2) HYDRATE THE SKIN AND REPLACE THE SEBUM
- 3) MAINTAIN THE SKIN

The third stage is extremely important and probably the most critical in preventing euthanasia. If we understand the normal skin cycle (keratinization) is 21 days and with ichthyosis it is every 3 to 4 days, then logically we should conclude that it is best to bathe the dog every 3 to 4 days to keep ahead of the debris. This is where we need to work with the owner to decide the best pathway. Most owners are not willing to spend the time and the money to see a groomer every 3-4 days. In most of the cases we have worked with (mainly Goldens) we have found that bathing them every 2 weeks is a satisfactory cycle. We are able to keep the debris to a minimum and maintain hydration to reduce flaking. A hydration spray can be made (from a humectant conditioner) and given to the owner to use daily, which also helps significantly in this situation. Another option is to have the owner bathe at home in between the groomer visits. If this route is chosen, it is imperative that you dispense the correct shampoo and conditioner (humectant) and teach them the correct way to bathe their pet. If not, the owner may use cheap, low-quality shampoo or conditioner that dries the skin and exacerbates the condition. Another mistake commonly made is the application of an emollient conditioner (which has fats and oils in suspension). This will break down the sebum and increase the level of flaking.

When the dog arrives for grooming or a bath, we should implement the close(condition)- open (shampoo)-close (condition) technique. Our goal is to remove as much of the skin debris as possible so the pet is not shedding flakes at home. The oils of the conditioner (first close) will break up the debris so we can remove it in the shampoo stage. We then follow it with a conditioner (second close) to maintain the skin hydration as well as possible. If the standard shampoo followed by conditioner process is used, you will find that your shampoo dries the sebum making it more difficult to remove and then when conditioned, the sebum will breakdown. That means the dog will be losing the "flakes" on the way home in the car and around the house. This is exactly what we are trying to avoid.

This is a process for success not just a specific product. It is a case in which it is imperative that the owner is involved every step of the way as part of the solution. We must check in often with the owner to evaluate how they are feeling just in case their thoughts on the situation change. Ichthyosis can be a very frustrating and challenging disease but it does not have to be a death sentence. With education, the right tools, and good management, we can do our very best to help the client deal with it.



Courtesy of Cate Garcia