

## **AN INJURY, ITS CAUSE AND EFFECT ON THE CARDIGAN WELSH CORGI**

How often do we hear the disappointed breeder say, I had such a promising Cardigan puppy, but sadly his front has gone on him. The standard calls for a slight bow in the forearm and also a sturdy animal. With dwarfed legs and the body of a strong working animal capable of endurance. We are asking for a measure of deformity in our breed, and treading a very fine line of soundness. Many breeds have this dwarfed leg construction but the Cardigan would be one of the heavier of these breeds. This I believe makes our puppies more susceptible to injury. Probably we are increasing the injury risk in modern times by rearing puppies better (we think), building good body weight and bone at an early age. We have also removed the weight limit from our standard, so tending to allow a heavier dog within our height limit.

There are Cardigan breeders who consider this foreleg problem is inherited. Reading L.J. Anderson and A. Holway of Massey University's paper on this subject, we can see that this is in fact an injury that puppies of the type and build of the Cardigan are very susceptible to. To examine heredity would involve the collecting of a great deal of information, with all breeders working together. This would be, of course a retrospective study. In order to establish the existence of a heritable factor, it would be necessary to select animals suffering from the condition of forearm deviation, and conduct a careful, in depth study, in which whole litters from many generations would need to be followed through to maturity.

In my opinion it would be best for all breeders to accept the injury fact, and for us all to talk freely with one another. Hopefully coming up with ideas of why some breeders are having a greater number than others suffering the injury.

We should not have to mollycoddle puppies during the at risk age of from 4 to 8 months of age. To prevent them from natural play and rough and tumble would restrict both muscle and personality development. The growing puppy can suffer a very small knock on the crucial growing point of the radius or ulna (or a much greater knock on the non growing part of the bones, suffering no long term problems) causing an upset in growth of these two parallel bones. If one grows faster than the other, the joint is affected. The carpal bones below or the elbow above are slowly pushed out at an angle. If untreated the dog is likely to become badly crippled on reaching maturity. At the time of injury the puppy might show only slight or even no sign of discomfort, it will be weeks later when the uneven growth of the bones starts to put pressure on the joints that the problem will really become noticeable. At this early stage, if the joints are X-rayed the problem can be identified.

Surgery can be very effective, but the success depends on so many things such as how much longer the puppy is going to go on growing, and how much permanent damage the joints have already suffered. I also believe that at the time of injury the puppy can favour this limb and put too much pressure on the other leg, often resulting in damaging this leg also. This would cause both legs to become equally distorted.

As responsible breeders, now we know that this injury can be treated, it is our duty to see that affected puppies are given veterinary attention. It is very distressing to see a dog of only a few years old obviously restricted in activity and crippled with arthritis.

This problem is not a new one, in 1963 in U.S.A. there were 98 REPORTED cases involving 24 different breeds. (Refer "Genetics of the dog" by Burns and Fraser).

Talking to many breeders it appears that many lines have puppies affected, at some time over the years. In fact, I would say it can crop up at any time. Like the problem with backs or even cruciate ligament injuries. These are not inherited but some families have a greater tendency toward

developing these problems, as indeed human families suffer in the same way.

Environment must also play a part, also feeding and temperament of puppies. Some precautions can be taken in not letting puppies jostle each other going through small gateways, not playing rough games on hard concrete. Not letting youngsters leap off high places. My experience with Cardigans is that they are more energetic and adventurous than many breeds. Compared with Pembrokes, I would rate them as nearly twice as exuberant.

The Cardigan is a slow maturing breed and I think we often look for puppies that will be winners in the show ring at too young an age. We should perhaps look for a pretty straight front (when viewed from the front) but not wide, the bow will develop as the chest drops and the dog matures. We should aim at breeding for good front angulation, with humerus and scapula of equal lengths providing natural cushioning to the front assembly. Some of the wording in the standard for the Dachshund could well be applied to our Cardigan standard.

Whether a dog that has been treated for foreleg injury is fit to be shown or bred from is something which can only be decided on maturity. In most cases I have observed the dog is inclined to move a little short on the treated leg. This can affect his chances of much show success.

After reading N.Z.K.C. show regulation number 16(b) there is clearly no reason for anyone not to show or breed from a dog treated for this injury, if they so wish. I am sure each country would have a similar clause in their Kennel Club regulations.

If a dog or bitch comes through all this treatment with flying colours, it is great credit to the veterinarian involved and to the observant owners who have detected the injury in its early stages.

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