

Bleeding Disorders - Golden Retrievers

courtesy of Animal Info Publications

What are bleeding disorders?

A bleeding disorder is any condition that means the dog cannot limit bleeding, often from minor injuries. This may mean excessive hemorrhaging from a small wound to extensive bruising. Von Willebrand's disease is the most common bleeding disorder. There is also haemophilia. The Golden Retriever is considered to be vulnerable to both of these conditions.



Incidence

Low

What is Von Willebrand's disease?

Von Willebrand's disease (vWD) is a genetically carried condition that causes blood clotting problems. This of course is can be a serious issue if your dog has vWD and needs surgery as the risk factor is dramatically increased. Veterinarians can conduct a quick in house blood clotting test (mucosal bleeding time) prior to performing surgery on dogs that are believed to be at risk of having vWD. If the clotting time appears slower than normal this will allow them to prepare and take precautionary measures during the procedure (preparing IV fluids, clotting factors and at the worst case scenario ensuring blood is available for transfusion). However the nature of the von Willebrand's clotting defect means a dog may initially test normal for clotting factors but during blood loss in surgery these clotting factors may be depleted more rapidly than in a dog without vWD.

The CIDDB database (see resources section) states the Golden Retriever has a slightly increased risk of carrying vWD. The GRCA National Health Survey found that only 1.6% of Golden Retrievers tested had von Willebrand's. This is a risk factor of 1 in 50.

What are the signs or symptoms?

Some affected dogs may display serious bleeding symptoms including excessive bleeding during teething, oestrus and even haemorrhaging from small wounds. Other affected dogs can survive invasive surgery without any complications. The reasons for this are not well understood. We do know that the level of von Willebrand's factor in an affected dog's blood can vary throughout its lifetime. However the disease can be managed with the advice of your veterinarian and in most cases does not represent a serious threat to your dog.

What are the chances of my Golden being affected?

As mentioned above, there is a 1 in 50 chance your Golden may be affected by vWD. (Compare this to the Doberman breed which has a 1 in 3 chance!)

Are tests available?

The Elisa assay blood test for vWD, tests for carrier status only and can be inaccurate if the dog is ill and has received medications in the last few weeks. It is also affected by vaccinations, pregnancy, lactation, heat (for bitches) and stress. This test measures the amount of von Willebrand's factor in the blood which as mentioned earlier, can alter during a dog's life. It may be a useful test for your veterinarian to perform prior to surgery to determine risk levels in dogs that are affected (keeping in mind the limitations discussed above). It is not a test that provides good reliability for breeders trying to breed out the condition.

Unfortunately there are no genetic tests available currently for vWD in the Golden Retriever. This is because the incidence is so low in the breed. It is thought that vWD in the Golden Retriever is an "incomplete dominant" - this means that dogs carrying the disease will pass it on to roughly half of their offspring. The best protection against buying a puppy with vWD is to buy from a reputable breeder who will not breed from dogs that have a blood clotting disorder.

Haemophilia (A and B)

These bleeding conditions will cause the same symptoms as vWD. With haemophilia A, the gene that causes the disease is the gene for the clotting factor VIII which is linked to the X chromosome. There are experimental tests to identify these genes at this stage but there is still no definitive test that is readily available to identify carriers. The best you can do is discuss with your breeder if any dogs in their genetic lines have shown evidence of bleeding disorders. It is a much rarer condition than von Willebrand's - the GRCA National Health Survey did not find any sufferers in their study group.