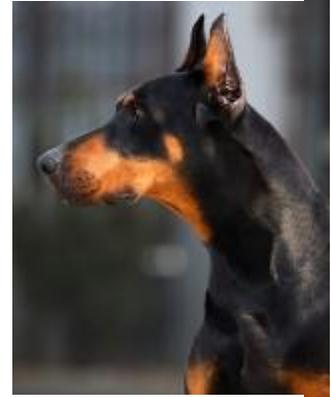


Hypothyroidism in Dobermanns

courtesy of Animal Info Publications

What is Hypothyroidism in Dobermanns?

Hypothyroidism is the most common hormone imbalance in dogs. The Dobermann is one of the breeds with a predisposition for the disease. The thyroid gland (located in the throat) does not produce enough of the thyroid hormone thyroxine. This can be caused by an immune-mediated destruction of the thyroid gland, by natural atrophy of the gland due to age, by a dietary deficiency or as a congenital problem. It typically develops in middle aged or elderly dogs and has a slow onset. It can be readily and safely treated with the administration of daily thyroxine tablets.



What are the signs or symptoms?

The symptoms are very slow to appear and some may be difficult to pick because of this very insidious onset. The classic set of symptoms in a hypothyroid dog includes;

- lower energy levels. Lethargy, mental dullness
- skin abnormality (flaky, dry, thin)
- hair loss (starting on the tail causing a 'rat-tail' appearance, and extending to a bald area around the neck, belly and back)
- hair becomes brittle and dry (often the outer hairs break off leaving a soft, thin under coat)
- obesity (despite a good regulated diet)
- increased susceptibility to infections
- cold intolerance
- infertility
- a thickening of tissues around the face and head leading to more skin folds and what can be described as a 'tragic face'

The symptoms may progress to neurological signs (head tilt, balance disruption, drunken gait, weakness in limbs, abnormal gait) and eye changes (corneal dystrophy). Blood tests will show high levels of blood cholesterol and fat and low levels of thyroxine.

How is it diagnosed?

In Dobermanns, hypothyroidism is nearly always caused by auto-immune problems but the exact mode of transmission and how it is inherited is as yet unknown. Autoimmune thyroiditis is tested by blood testing for thyroglobulin autoantibodies. Antibodies are proteins designed to defend the body from foreign organisms such as bacteria and viruses. In autoimmune hypothyroidism, antibodies attack and destroy thyroid gland cells preventing the gland from being able to release normal amounts of thyroid hormone.

How can I avoid buying a dog with it?

Testing should not be started until the onset of sexual maturity. Periodic retesting is required as the development of these autoantibodies is an indication that the dog has the genetic form of the disease. These autoantibodies generally appear by 3-4 years of age and appear before the onset of symptoms. A negative test does not mean the dog will be free of the disease in the future. It should be retested every year or two after the initial test.

Owners should be aware of the symptoms of this disease and take their dog in for testing if they appear. The disease has an excellent prognosis once it is recognised and with treatment the dog will have a long and healthy life.

Breeders should test their animals at regular intervals and plan their mating strategies with the knowledge of the dog's status and its lineage. In this way the incidence of autoimmune thyroiditis in the offspring can be minimised. The Orthopedic Foundation for Animals (OFA) has a database that breeders can use when choosing dogs for their breeding programs. This database has found that only 6.7% of Dobermanns tested were positive for hypothyroidism.

Incidence

Low incidence

Link with Von Willebrand's disease

It is important to note that as hypothyroidism progresses, the Dobermann that is affected for von Willebrand's disease may also become more susceptible to blood clotting problems.