



Hypothyroidism in dogs

What is hypothyroidism?

The thyroid gland is located in the neck and has two lobes, they produce thyroxine hormone which regulates the metabolism. Hypothyroidism occurs when the thyroid gland does not make enough thyroxine hormone and so the metabolism slows down. This condition is most common in middle aged, pure bred dogs. Some breeds are predisposed to developing hypothyroidism e.g. dobermann pinschers and golden retrievers.

What causes hypothyroidism?

In dogs the most common cause of hypothyroidism is thought to be an immune-mediated disease. The immune system decides that the thyroid is abnormal or foreign and attacks it. Hypothyroidism may also be seen if there is cancer of the thyroid but this is very rare.

What are the clinical signs?

Most dogs with hypothyroidism have one or more of the following symptoms:

- Weight gain without increased appetite
- Lethargy and lack of desire to exercise
- Heat seeking behaviour
- Dry, dull, thin coat with excessive shedding and flaking
- Bald patches on the flanks
- Increased susceptibility to skin and ear infections
- Abnormalities of the reproductive and nervous systems (less common)

Very rarely a case with severe hypothyroidism can present in a myxoedema coma state, they may have puffy skin on their forehead and face and lethargy progresses to coma.

How is it diagnosed?

A definitive diagnosis of hypothyroidism requires a blood test which measures the total thyroxin level (TT4) and the thyroid stimulating hormone level (TSH). A true hypothyroid dog will have a high level of TSH but a low level of TT4. Dogs with non-thyroidal illness will often have a low TT4, this is because the body controls the metabolic rate during illness to improve the chances of survival, it is not an indication of inadequate thyroid function.

How is it treated?

Hypothyroidism is easily treatable but not curable. It is treated with oral administration of thyroid replacement hormone. This drug must be given for the rest of the dog's life. This can be given as a tablet or a liquid preparation and is usually given once a day. Blood tests will be used along with clinical signs to determine the correct dose for your dog. Once your dog is stable we recommend a blood test every 6 months to ensure that the medication is still effective. Blood tests should be taken 3-4 hours after the medication has been administered.

Updated January 2020