



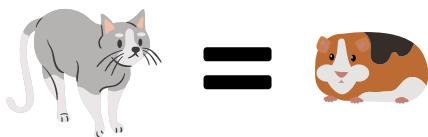
Yes! Guinea pigs get hyperthyroidism.

This disease has been reported previously in the German literature and is now gaining recognition in North America. As an interesting side note, it is illegal to have only one guinea pig as a pet in Switzerland. They are highly social animals and this fact should be recognized as part of the ideal husbandry.

It is felt that clinical hyperthyroidism may be an underdiagnosed disease. It was the fifth most common neoplasm detected grossly in a review of over 500 guinea pig veterinary pathology submissions. The top four were: lipomas, trichoepitheliomas, lymphoid and mammary neoplasms. Two thirds of cases were due to thyroid adenomas and one third to thyroid carcinomas.

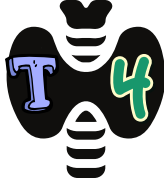
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Most guinea pigs were 4-5 years of age but the range was 2- 8 years. Females appear to be at increased risk.



Do guinea pigs show the same clinical signs as cats?

Yes, the majority of clinical signs are similar to cats. Noted clinical findings with confirmed thyroid neoplasms included hyperactivity, weight loss (95%), restlessness, polyuria or polydipsia, hair loss or poor hair coat quality, diarrhea, heart murmur, tachycardia, bounding pulses and tachypnea. There was not a consistent record of increased appetite and both increased, decreased or no change in food intake was noted. Unique to the guinea pigs was an increased difficulty to rouse from sleeping and sleeping in lateral recumbency. Osseous metaplasia may also be present. Experimentally induced hyperthyroidism has been associated with hypertension but it is difficult to obtain a blood pressure in patients with naturally occurring disease. Almost half of the cases had a palpable cervical mass. Not being able to palpate a mass does not rule out hyperthyroidism. Given these are relatively senior patients there may be several comorbidities including ovarian cysts, dental disease, hepatopathies, nephropathies and cardiomyopathies.



Making the Diagnosis

Like in other species diagnosis is based on elevated circulating total thyroxine (TT4) measured by competitive chemiluminescent immunoassay or radioimmunoassay and/or free thyroxine (FT4) by equilibrium dialysis. Several reference range intervals have been made according to age, sex and reproductive status. Nuclear scintigraphy has been used to diagnosis hyperthyroidism in one clinical case.

Treatment ?

There is much to be learned about the best treatment in guinea pigs but similar options exist with respect to methimazole, radioactive iodine and surgery. There are a variety of responses and survival times in the current literature as well as a significant need for additional information.



Two rabbits with suspected hyperthyroidism are noted in the literature. Confirming the diagnosis is a challenge in rabbits. There is a lot of experimental information available however natural disease may present differently and include non-specific clinical signs. Weight loss, heart disease and alopecia should trigger hyperthyroidism as a differential diagnosis.



Reference:

DiGeronimo PM, Brandão J. Updates on Thyroid Disease in Rabbits and Guinea Pigs. *Vet Clin North Am Exot Anim Pract.* 2020 May;23(2):373-381. doi: 10.1016/j.cvex.2020.01.007. PMID: 32327042.

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