



**University of
Zurich**^{UZH}

**Zurich Open Repository and
Archive**

University of Zurich
Main Library
Strickhofstrasse 39
CH-8057 Zurich
www.zora.uzh.ch

Year: 2014

Acromegaly: important disease or a distraction?

Reusch, Claudia E

Posted at the Zurich Open Repository and Archive, University of Zurich

ZORA URL: <https://doi.org/10.5167/uzh-96628>

Conference or Workshop Item

Originally published at:

Reusch, Claudia E (2014). Acromegaly: important disease or a distraction? In: BSAVA, Birmingham, England, 3 April 2014 - 6 April 2014.

Acromegaly: important disease or distraction

Claudia E. Reusch, Prof. Dr., Dipl ECVIM-CA

Clinic for Small Animal Internal Medicine, University of Zurich, Switzerland

creusch@vetclinics.uzh.ch

Stijn J.M. Niessen, Dr., Dipl ECVIM-CA, PhD, PGCVetEd, FHEA, MRCVS

The first two cats with diabetes mellitus and acromegaly were described in the mid 70ths of the last century. During the following 30 years further cases were only published sporadically and acromegaly was considered to be a rare disease. The rareness started to be questioned in 2007 when blood samples of diabetic cats were screened in the UK for possible presence of acromegaly by measuring IGF-1 levels. They were found to be increased (> 1000 ng/dl) in 32% of diabetic cats. Further work-up was possible in 18 of those cats and acromegaly was confirmed in 17 of them. Another, larger screening project was undertaken by the same research group and found increased IGF-1 in 27.3% of diabetic cats. These combined results suggest that the prevalence of acromegaly is high, at least in the UK (Niessen et al 2007, Niessen et al 2013). However, when similar studies were performed in Switzerland and the Netherlands, prevalence of high IGF-1 levels was substantially lower (17.8%). Most importantly, no pituitary mass was found in the majority of cats with high IGF-1 levels in which CT imaging was performed in the Suisse-Dutch study (Schaefer et al 2013).

The speakers, involved in the UK and Suisse-Dutch studies respectively, will give their (at times opposing) views and discuss the following topics with the delegates:

- What is the estimated prevalence in the overall population of diabetic cats and in cats which are difficult to regulate?
- What does a high IGF-1 level mean, resp. what are causes for false positive results? Diagnostic tests may also be false negative, is this also true for IGF-1?
- Is it good medicine to routinely screen every diabetic cat for acromegaly?
- Should the assumption that at least 80% of diabetic cats suffer type 2 diabetes be discarded?
- What are the most typical abnormalities in cats with acromegaly? Are they always present?

- Can acromegaly be overlooked during physical examination?
- Are all acromegalic cats insulin-resistant and how much insulin do they need?
- Surgery, radiation or medical treatment: which is best?

Niessen et al: Feline acromegaly: an underdiagnosed endocrinopathy? JVIM, 21, 899, 2007

Niessen et al: Hypersomatotropism, acromegaly, and hyperadrenocorticism and feline diabetes mellitus.

Vet Clin North Am Small Anim Prac, 43, 319, 2013

Schaefer et al: Evaluation of IGF-1, TT4, fPLI and UCCR in cats with diabetes mellitus in Switzerland and the Netherlands. 23rd ECVIM-CA Congress, 12. -14-9. 2013, Liverpool, UK.