

Society for Endocrinology – Media Release

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Older cats are prone to thyroid disease

Thyroid disease is one of the commonest hormonal diseases in humans, but now research presented at the Society for Endocrinology's annual meeting in Birmingham shows that older cats are also susceptible to thyroid disease.

Estimates of numbers vary, but most experts agree that around 1 woman in 13 in the UK will have thyroid disease, with the figure increasing for older women. Figures being presented at the Birmingham meeting will show indicate that a tendency to thyroid disease is even more common in older cats.

In humans, low thyroid activity is common, but in cats having an overactive thyroid is a more common problem. Apart from humans, cats are the only species where non-cancerous hyperthyroidism has been recorded. Hyperthyroidism in cats was first reported in the late 1970s and has since been recognised as the most common hormonal disease of older cats.

Dr Jenny Wakeling's research at the Royal Veterinary College (London), studied 100 cats over 8 years of age, visiting a veterinary practice for routine health checks. The thyroid hormone measurements were repeated after a period of about a year.

They found that in apparently healthy older cats – cats more than 8 years old – around 6% of cats had hyperthyroidism. In addition 20% had subclinical hyperthyroidism – in other words they had an abnormal thyroid function, but not the full-blown disease. However the research also showed that cats with subclinical hyperthyroidism had a high risk of becoming hyperthyroid within 18 months.

In 1999, Cats Protection estimated that there are 5 million domestic cats in the UK, not including stray and feral cats. It's not known how many of these are more than 8 years old.

Dr Wakeling said:

What this means is that around a quarter of older cats – older than around 8 years - will either have thyroid disease, or have a tendency to develop it. It's something that owners need to keep an eye on.

You tend to notice it if your cat is eating a lot but losing weight. Then you may pick up other symptoms, such as hyperactivity, fast heart rate, and a poor coat. You might also find that the cat gets stressed and angry more easily. This can easily be treated, and if in doubt you should take your cat along to your vet for a blood test. It's not only humans who get hormonal problems.

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Notes for editors:

This poster, number P315, will be presented at the Society for Endocrinology spring meeting. Posters will be attended between 12:00 – 13:00 on Wednesday 7 March 2007. The abstract for this work is reproduced below: see <http://www.endocrine-abstracts.org/ea/0013/ea0013p315.htm>.

The Society for Endocrinology spring meeting is Britain's biggest hormone meeting, and is taking place at the ICC, Birmingham, from 5-8 March.

Please mention this meeting in any story

For more information please contact Tom Parkhill or Jo Thurston on 01454 642230 or 07971 691774.

ABSTRACT:

Subclinical hyperthyroidism in cats

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Cats are the only species, other than humans, in which naturally occurring, non-malignant hyperthyroidism has been recorded. Feline hyperthyroidism has many similarities to toxic nodular goitre, including age at risk, presentation, histological features and similar 'switch-on' mutations of the TSH receptor and linked G-proteins. Subclinical hyperthyroidism is well recognised in humans but has only recently been described in cats. We present preliminary data from a prospective study documenting the prevalence and progression of subclinical hyperthyroidism in senior (>8 years) cats.

Cats presenting for routine health checks were recruited for the study. A full history, standardised clinical examination, cystocentesis and blood sampling were performed at each visit. Owners were requested to complete a questionnaire detailing the cat's environment, diet and exposure to potential toxins. Full biochemistry and urinalysis were performed every 6 months and total thyroxine (tT4) and thyrotropin (TSH) concentrations (by DPC chemiluminescent assay) determined at least every 12 months. For the purposes of this study, subclinical hyperthyroidism was defined as tT4 <45 nmol/L (reference range 19–55 nmol/L) in conjunction with TSH <0.03 ng/ml.

One hundred senior cats have been recruited to date of which 6% had mild clinical hyperthyroidism (tT4>55 nmol/L), 20% had subclinical hyperthyroidism and 13% had other problems (chronic kidney disease $n=7$; hypertension $n=5$; diabetes $n=1$). To date, 6/38 (16%) previously non-hyperthyroid cats have been diagnosed hyperthyroid within 12 months; 5/6 were subclinically hyperthyroid at the initial visit and one had within reference range TSH concentrations. Remaining cats ($n=3$) with persistently

low TSH (<0.03 ng/ml) but tT4 <45 nmol/L at follow up had a mean 85% increase in tT4 concentrations. Only one cat with low TSH concentration (<0.03 ng/ml) when first examined, subsequently showed an increase in TSH concentration.

These data confirm a high prevalence of subclinical hyperthyroidism, as defined in this study, in senior cats, with a high risk of progression to clinical disease within 12 months.