

Robotic cats, a kitten mummy and a major UK vet gathering

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A possible new feline disease identified by veterinarians in Scotland leaves cats walking like robots. Meanwhile thousands of years and miles apart, new research sheds light on cats bred to become mummies in Egyptian antiquity. Ahead of the small animal veterinary world converging for the UK's largest ever veterinary event, the *Journal of Feline Medicine and Surgery* (JFMS), published by SAGE, highlights these two fascinating studies among a range of papers all aiming to advance feline acumen and clinical know-how.

April 11th sees over 300 world-class veterinary speakers converging for the WSAVA/FECAVA/BSAVA* World Congress 2012 in Birmingham UK. The current issue of the new-look JFMS, timed to coincide with this major veterinary event, includes a short paper on an X-ray investigation of a four or five month-old cat mummy.

From about 332 BC to 30 BC in Egypt, cats were raised near temples specifically to be mummified. People bought the mummies to use as offerings to the goddess Bastet. Cat mummies from this period are common. In fact they were shipped in bulk to Liverpool, UK in the 19th century to be pulverised and used as fertiliser. However, at the height of their popularity many Egyptians would buy 'budget' mummies containing just a handful of bones. This contrasts with the mummy in the JFMS study.

The National Museum of Parma, Italy bought the mummy in the 18th century from an antiquarian. The study authors say it is a high-quality



archaeological <u>artefact</u>, because the body inside the <u>mummy</u> was complete, wrapped intricately and decorated with geo¬metrical patterns and depicted eyes. The tightly packed cat was probably treated with natron, a naturally-occurring mixture of sodium carbonate decahydrate, sodium bicarbonate, and small amounts of salt, sodium sulphate and herbs used to dehydrate the body, just as for human mummies.

Embalmers put the cat in a sitting position before mummification, with flexed hind limbs and its forelimbs extended against the thorax, a position similar to the seated cats depicted in hieroglyphics from the same era. They also fractured a vertebra at the base of the spine to position the tail as close to the body as possible. A hole in the cat's skull may have been the cause of death, and also for draining the skull's contents.

"The fact that the cat was young suggests that it was one of those bred specifically for mummification," says lead author Giacomo Gnudi, a veterinary professor at the University of Parma.

Robotic cats in Scotland

Back in modern-day Scotland, vets have been trying to explain strange symptoms in 21 cats that arrived at Strathbogie Veterinary Centre, Huntly, and Morven Veterinary practice, Alford, both in North-East Scotland, between 2001 and 2010.

The animals appeared to have a slowly-progressing neurological disease. Walking with an odd gait with stiff, extended tails, the cats – dubbed robotic cats due to their movements – presented a veterinary oddity not seen before. Cats with a slightly different but possibly related condition have been spotted in Sweden and Austria, where it was referred to as "staggering disease." Histological tests suggested a central nervous system infection, lymphohistiocytic meningoencephalomyelitis, could be



the cause.

The cats had outdoor access and lived in the same geographical rural area. When the vets looked at immune system markers they found a significant expression of the interferon-inducible Mx protein, a sign of an as yet unidentified infective or environmental immunogenic trigger for the illness.

"All the cats included in our study, and most of the cats reported with 'staggering disease', belong to the rural population accustomed to hunting birds and rodents," says one of the study's authors, Luisa De Risio. "It can be speculated that the aetiological agent may be transmitted from these animals to cats."

The authors conclude that the late onset age of this disease, its slow progression, peculiar clinical signs and the data from the tests suggest these cats were affected by the same unique, previously unreported condition.

More information: Both articles will be free to access for a limited period:

Radiological investigation of an over 2000-year-old Egyptian mummy of a cat by G Gnudi, A Volta, S Manfredi, F Ferri and R Conversi - ifm.sagepub.com/content/14/4/292.full

Slowly progressive lymphohistiocytic meningoencephalomyelitis in 21 adult cats presenting with peculiar neurological signs by Luisa De Risio, Richard Brown, Bryn Tennant, Andy Sparkes, Lara Matiasek, Alberta de Stefani, Herbert Weissenböck and Kaspar Matiasek - ifm.sagepub.com/content/14/4/250.full



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