Burmese Hypokalaemia

About the disease

Burmese Hypokalaemia (Familial Episodic Hypokalaemic Polymyopathy) is characterised by episodes of low serum potassium levels and high CPK (an enzyme that indicates muscle damage).

Clinical signs include skeletal muscle weakness, which is episodic in nature and can affect the whole animal or may be localised to certain muscles. This is most obvious in the neck muscles, but sometimes occurs in just the limbs. As a result affected cats tend to have problems walking and holding their head correctly.



Please follow this Link to a YouTube video of an Asian variant with this condition - <u>Burmese</u> <u>Hypokalaemia</u>

About the test

A research team consisting of veterinarians and geneticists from the University of Bristol (Langford), UC Davis, University of Sydney, Massey University and Justus Liebig University have recently identified the genetic mutation responsible for Burmese hypokalaemia, allowing a genetic test to be developed. This is an autosomal recessive disease, meaning that two copies of the mutated gene are required for disease.

Interpretation of results

A **Normal** Burmese Hypokalaemia genetic test result means that the cat does not have the known genetic mutation causing Burmese Hypokalaemia.

A **Carrier** Burmese Hypokalaemia genetic test result means that the cat has one copy of the Burmese Hypokalaemia mutation. The cat will not have Burmese Hypokalaemia, but may pass the mutation to their offspring.

An **Affected** Burmese Hypokalaemia genetic test result means that the cat has two copies of the Burmese Hypokalaemia mutation. The cat will have Hypokalaemia.

Each certificate we issue will specify whether the cat is Normal, Carrier or Affected for the known Burmese Hypokalaemia mutation.

Reception Hours Mon-Fri 9am - 5pm Contact Us

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FAQs

What breeds are at risk?

Asian, Australian Mist, Bombay, Burmese, Burmilla, Cornish Rex, Devon Rex, Singapura, Sphynx, Tiffanie and Tonkinese.

Can my cat go on the ICC negative register?

Yes it can! For cats to be placed on the ICC negative register the sample (mouth swab or blood sample) MUST be taken by a vet who confirms the cat's identity using its microchip number. The microchip number must be written on the submission form AND sample.

We have a dedicated submission form for this purpose, which both the owner and vet must complete. Our result certificate will state that the cat's identity was confirmed by a vet and you can use this to register the cat on the ICC negative register.

If you DO NOT want your cat to go on these registers then you can take a mouth swab and submit it directly to the lab.

What are the genetics of breeding?



Autosomal Recessive

Burmese hypokalaemia is an autosomal recessive disease, this means that Carrier cats DO NOT show signs of disease. However, mating two Carriers will, **on average**, produce the following ratio of kittens: 25% Normal 50% Carrier 25% Affected

Therefore, it is NOT recommended to breed two Carrier cats together, since this can produce Affected kittens.

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What do I do with a Carrier?



Breeding is still possible

It is possible to continue to use Carrier cats in breeding programmes to retain important breeding lines and to avoid reducing the size of the Burmese gene pool.

As long as Carrier cats are mated to Normal cats no Affected kittens will be produced. This mating is likely to produce kittens that are Carriers, which can be identified by genetic testing and, if necessary, future matings arranged with Normal cats.

What do I do if I have an Affected cat?

Affected cats can usually be managed effectively by giving potassium supplements to their diet. This will reduce the signs of disease or minimise their frequency and severity.

In some Affected cats, signs of disease seem to disappear when they get to 1-2 years of age without the need for further treatment.



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