



Linnet Way
Brickhill
Bedford
MK41 7HN
T: 01234 261 839

HYPERTENSION IN CATS

Hypertension is the medical name for high blood pressure. Hypertension is fairly common as pets get older, much more so in cats than in dogs. It is estimated that 1 out of every 8 cats over the age of 9 years will have hypertension. The International Society of Feline Medicine recommends that all cats over 9 years of age have their blood pressure measured every year. This check is now included free of charge in the annual health check and vaccination appointment, but can be performed at any time for the usual charge of £26.

How is blood pressure measured?

In most cases, blood pressure is measured using a cuff on the tail which inflates and deflates just like a human blood pressure cuff. If necessary, the cuff can be placed on a leg instead.

We try to keep the patient as calm and still as possible when taking the reading. It is usual to disregard the first reading and then to take a number of readings. When we get a run of three similar readings, we stop the test and average these three readings. Taking a number of readings like this does mean that the test can take a few minutes to perform, but it makes the results far more reliable.

What are the effects of hypertension?

- **Eyes** – high blood pressure can cause bleeding at the back of the eyes causing retinal detachment and loss of vision.
- **Nervous system** – high blood pressure can cause bleeding in the brain and other parts of the nervous system. This can cause altered behaviour, confusion and fits.
- **Heart** – high blood pressure makes it harder for the heart to pump blood around the body. This can lead to thickening of the heart muscle, rhythm problems, heart murmurs and possible heart failure.
- **Kidneys** – high blood pressure can damage the kidneys, increasing the risk of chronic kidney disease.

It often takes many months before the hypertension causes damage to the body. For this reason it is sensible to have your pet's blood pressure checked regularly as they get older, so that high blood pressure can be treated before any of the above problems develop.

What causes hypertension?

High blood pressure can just occur for no reason. We describe this as primary hypertension. Cats with primary hypertension should receive medication to reduce the blood pressure back to normal, but do not have any other illness to be treated.

In other cats, the hypertension has occurred because of another illness. We describe this as secondary hypertension. Kidney disease, hyperthyroidism, heart disease or hyperaldosteronism can all increase a cat's risk of developing hypertension. These patients will still need medication to reduce their blood pressure, but they will also need treatment of the underlying condition.

For this reason, when a patient is first diagnosed with hypertension, we recommend testing for underlying conditions as well as prescribing medication to bring the blood pressure down.

We do recognise that blood pressure is likely to rise a little simply through the stress of the cat being at the surgery. For this reason, although a normal blood pressure for a cat is 150mmHg or less, when we are screening cats that have no other signs of high blood pressure we do not start to worry unless the blood pressure reading at the surgery is over 170mmHg. Borderline cases are advised to come back 1-2 weeks later for a second blood pressure check before a diagnosis is made.

The following table is a rough guide to the way that we interpret the blood pressure readings of apparently healthy cats (for example, at the time of vaccination). Please be advised that this is only a guide, and your vet will make an individual decision depending on your cat's health, history, and temperament. For example, if your vet detects damage to the blood vessels at the back of the eyes, or your cat is having fits, investigation and treatment will be initiated at a much lower blood pressure level.

Acorn House screening protocol for diagnosing hypertension in healthy cats

BLOOD PRESSURE	ACTION	FURTHER ACTION
Less than 170	None - retest in 12 mths	
170-180	Acceptable if cat significantly stressed. If appeared calm, recheck in 1-2 weeks (this repeat check is charged for)	If still over 170 on second reading recommend check blood tests for underlying illness and start treatment with amlodipine.
More than 180	Recommend check blood tests for underlying illness, start treatment with amlodipine, and recheck blood pressure in 2 weeks.	If blood pressure is between 110 and 160 continue with the same amlodipine dose and recheck in 3 months. If not, adjust dose of amlodipine and recheck in 2

		weeks. Once stable, blood pressure should be checked every 6 months.
--	--	--

How is hypertension treated in cats?

Hypertension can usually be controlled very effectively in cats using a medication called amlodipine. The medication is very safe to use and almost all cats can be controlled with this tablet medication just once daily.

Cats taking this medication will have their blood pressure checked after two weeks of medication. The dose can be adjusted at this stage if necessary.

Treatment is lifelong because as soon as the cats stop taking the medication, their blood pressure will rise again. Cats on medication will have their blood pressure checked at least every six months to ensure that the hypertension remains well controlled.

A liquid blood pressure medication (telmisartan) is an alternative to amlodipine for clients that prefer a liquid medication. This is also given once daily but it can be slower to take effect, and sometimes the blood pressure needs to be monitored more frequently / closely after starting treatment with this medication.

What if my pet has already suffered blindness?

Sometimes the first sign of high blood pressure in cats is a sudden onset of blindness. In these cases medication must be started immediately to reduce the high blood pressure. Rest is also advised. If the blood pressure can be reduced within 24-48 hours of the blindness starting there is a chance that vision may be restored. Unfortunately if the blindness has been present for several days, it is likely to be permanent.

If your pet does not recover their sight, they may seem confused and bump into things initially, however they can still have a good quality of life. Many pets seem to adjust to being blind after a few days or weeks, and learn to rely more on their other senses. There are cases reported of completely blind cats being able to hunt mice and birds!

Even where permanent blindness has occurred, it is still important to control the blood pressure to prevent further damage to the other body organs.

Updated March 2022