



Hypertension (High Blood Pressure) in Cats



PETVET clinics are well-equipped, full-service, small animal veterinary practices providing comprehensive diagnostic, medical, surgical and dental care. We aim to offer quality service, giving your pet the maximum opportunity to lead a long and happy life.

ALL THE CARE YOUR PET NEEDS!



What is Hypertension?

Hypertension is the medical term for high blood pressure. Hypertension is a common problem in people, and is now recognised as a common condition in older cats.

Feline hypertension is commonly found as a complication of other underlying medical conditions (*secondary hypertension*), although hypertension without any underlying disease (*primary hypertension*) may also be seen in cats. In contrast to people, where primary hypertension is most common, secondary hypertension is more common in cats. The most common cause of secondary hypertension in cats is chronic kidney disease but other diseases, such as hyperthyroidism (over-active thyroid gland), can also lead to its development in cats too.

What are the effects of Hypertension?

Hypertension is damaging to the body. The effects are most serious in certain vulnerable organs:

Eyes

Bleeding into the eyes and retinal changes such as swelling and detachment can occur, and this may result in damage to the cat's vision (and even blindness), which is often permanent. In some cases, bleeding into the front chamber of the eye can be seen without the use of special veterinary equipment

Brain and nervous system

Bleeding in the brain can cause neurological signs such as odd behaviour, a wobbly or drunken gait, seizures, dementia and coma.

Heart

Over time, the muscle of one of the major heart chambers (the left ventricle) becomes thickened, as the heart works harder to pump the blood when there is high blood pressure. In very severe cases, this can lead to the development of congestive heart failure. Affected cats may show signs of breathlessness and lethargy.

Kidneys

Over time, high blood pressure damages the kidneys and may increase the risk of kidney failure developing. In cats with existing kidney disease, hypertension will make the disease significantly worse over time.

What are the Symptoms of Hypertension?

As hypertension is often seen as an effect of other diseases, cats with hypertension may be showing signs attributable to their underlying problem. For example, the major clinical signs of hyperthyroid cats with high blood pressure will be weight loss (in spite of a voracious appetite) and hyperactivity.

In many patients, no specific clinical signs of hypertension will be seen until the condition advances to the point where there is spontaneous bleeding into the eye or retinal detachment. These cats are often brought to PETVET as they develop sudden onset blindness. Early recognition of hypertension is therefore important in order to minimise the severe and often permanently damaging effects of persistently high blood pressure on the eyes and other organs.

Some cats with hypertension appear depressed, lethargic and withdrawn, and many owners notice an improvement in their cat's behaviour once hypertension has been successfully managed, even if signs of damage to other organs are not present. Severe headaches can occur in humans with hypertension, and it is likely that cats may suffer something similar.



How do we Diagnose Hypertension?

To detect hypertension early, and because it is more common in older cats, regular blood pressure checks are recommended in cats from 8 years of age. Initially these may be done once a year, but as the cat gets older these should be done a minimum of twice a year. Blood pressure assessment should be included in the routine clinical examination of all older cats.

Blood pressure should also be carefully assessed in any cat with chronic kidney disease, hyperthyroidism, heart disease, in cats with sudden onset blindness, or in cats with other eye or neurological signs that might suggest underlying hypertension.

The equipment used to measure blood pressure in cats is similar to that used routinely in people, with an inflatable cuff placed around one of the legs or the tail, but a Doppler unit is needed to hear the blood flow rather than a stethoscope. Measuring blood pressure only takes a few minutes, is completely pain-free and is extremely well tolerated by most cats.

A detailed eye examination is also essential since ocular disease is common in hypertensive cats. In mildly affected cats, subtle changes to the appearance of the blood vessels at the back of the eye and to the retina may be seen. In more severely affected cats, the changes can be dramatic and include retinal detachment and bleeding into the eye. Abnormalities are usually detected in both eyes although they may be more severe in one.

How is Hypertension Managed?

When hypertension is diagnosed, management has two broad aims:

-  Firstly, to reduce the blood pressure using anti-hypertensive drugs. A number of drugs are available and those commonly used include Amlodipine and Benazepril
-  Secondly, to search for an underlying disease, such as kidney disease, which has caused the hypertension. In some cases (for example hyperthyroidism), treatment of the underlying disease may also resolve the high blood pressure. These investigations often involve collecting and testing blood and urine samples

It is also important to assess what complications of hypertension are present in any patient (such as ocular disease) so that these can be appropriately monitored following therapy. There is a great degree of individual variation in response to anti-hypertensive drug therapy, and in some cats it can take some time to stabilise the blood pressure. This may involve trying several drugs, altering the dose and/or frequency of therapy, or using more than one drug simultaneously.

Response to therapy should be monitored by regular measurements of blood pressure, and also monitoring any ocular abnormalities. In patients with kidney failure, it is also important to monitor kidney function when using anti-hypertensive drugs.

What is the Prognosis for Cats with Hypertension?

In cats with primary hypertension (where there is no underlying disease causing the high blood pressure), it is usually possible to manage the hypertension and prevent future complications such as damage to the eyes.

In cases of secondary hypertension, the long-term outlook is very dependent on the nature and severity of the disease that has caused the high blood pressure. It is important in all cases that the hypertension is monitored as accurately as possible on a regular basis in order to avoid any problems.

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