Cuff 'em: catching hypertension in senior cats - a guide for veterinary nurses to establish cat-friendly screening protocols

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Introduction

Feline hypertension, often referred to as the 'silent killer', is an insidious condition that affects a significant proportion of senior cats. Often asymptomatic in its early stages, hypertension can lead to irreversible damage to target organs including the eyes, brain, kidneys, and heart. Despite its impact on feline health, routine blood pressure measurement is not yet universally integrated into wellness protocols in general practice. This paper summarises current best practices and clinical guidelines with the objective of enabling veterinary nurses to lead the implementation of standardised, cat-friendly blood pressure screening protocols for senior feline patients.

Rationale for routine screening

The importance of routine screening is highlighted by the case of Stanley, an elderly cat who presented with recent onset vision disturbances. Upon examination, bilateral retinal detachment was identified and attributed to persistently elevated systemic blood pressure. Although Stanley had attended veterinary consultations in recent months, his blood pressure had not been assessed. The case underscores a missed opportunity for early intervention, by illustrating the need for systematic blood pressure monitoring in senior feline patients. Systemic hypertension in cats often remains undetected until significant clinical signs or organ damage are present. In many cases, affected cats appear outwardly healthy, with no obvious abnormalities until complications arise. Common clinical presentations include sudden onset blindness, disorientation, or signs associated with chronic kidney disease. The insidious nature of feline hypertension underscores the need for proactive, routine screening to facilitate early detection and timely intervention.

Target organ damage: the consequences of untreated hypertension

- Eyes: Retinal detachment, haemorrhage, and sudden blindness are common sequelae. The eyes have delicate blood vessels that are particularly vulnerable to high pressure.
- **Brain**: Neurological signs such as disorientation, ataxia, seizures, or even acute collapse can result from cerebrovascular incidents.
- **Kidneys**: Already compromised kidneys can suffer further damage due to increased glomerular pressure, accelerating the progression of CKD.
- **Heart**: Chronic hypertension can lead to left ventricular hypertrophy and contribute to congestive heart failure.

Which cats should be screened?

According to the ACVIM and iCatCare guidelines, all cats aged seven years or older should have their blood pressure checked annually. Cats with known risk factors such as CKD, hyperthyroidism, or diabetes mellitus should be assessed more frequently. Specific indications include:

- Age \geq 7 years.
- Diagnosed renal, thyroid, or endocrine disease.
- Clinical signs suggestive of ocular or neurological pathology.
- Weight loss, behavioural changes, or unexplained physical deterioration.

Classification of feline hypertension

Identifying the type of hypertension is important for both diagnosis and management. Persistent high readings across multiple visits indicate a need for intervention, even if stress may be contributing. Σ

Feline hypertension is classified as:

- **Primary (idiopathic):** Elevated blood pressure without a known cause.
- Secondary: Most common in cats, associated with CKD, hyperthyroidism, or other systemic illnesses
- Situational (white coat): Elevated readings due to stress in the clinical setting. Can be mitigated with a calm environment and repeated measurements.

Persistent systolic pressure above 160mmHg, especially with signs of target organ damage, warrants treatment.

Guidelines for best practice

The ACVIM and iCatCare recommend standardised protocols, trained personnel, and stress-minimising environments for accurate blood pressure assessment. Senior cats without recent blood pressure checks should be scheduled for a BP measurement. This may be performed by a nurse in a designated quiet space, prior to examination by a veterinarian.

Implementing a cat-friendly protocol

Veterinary nurses are ideally positioned to implement and lead structured blood pressure screening protocols by focusing on:

Environmental factors

- Dedicate an area in the clinic (calm, quiet, separate room free from noise and other animals).
- Keep all equipment within reach.
- Basket for the cat to hide in with a blanket or use cat's own bedding.
- Use pheromones (e.g. Feliway).
- Make a sign for the door "Shhh ... Quiet, Please! Cat BP measurement in progress.

Restraint and handling:

- Minimal gentle restraint is vital.
- Allow the cat to acclimatise before assessment.
- Cat should be in a settled, relaxed, comfortable position on a non-slip surface.
- Distract with treats or pats.
- Patience and consistency lead to more accurate readings.

Measurement technique:

- Use the minimum number of people necessary and the owner can be present if helpful.
- Doppler or oscillometric devices with proper cuff size (30-40% of the circumference of the limb/tail where it is used).
- Cuff should be level with the heart and transducer tubing directed away from the cat.
- Use a stethoscope or headphones to keep doppler volume down low. Multiple readings (5–7), discard the first, average the rest.
- Record all details (iCatCare blood pressure evaluation form).

Client communication

Educating owners is essential. Use clear, accessible language:

"High blood pressure in cats is common, especially as they age. Unfortunately, signs may not appear until serious damage has occurred. A simple, non-invasive check can help us detect it early and protect your cat's health."

Providing written handouts or including blood pressure checks in senior wellness plans can help normalise and prioritise this essential care.

Conclusion

Feline hypertension is common and serious, especially among older or systemically ill cats. Given its silent progression, routine screening is essential. Veterinary nurses are well-placed to lead the charge in elevating standards of care by implementing effective, cat-friendly blood pressure monitoring protocols that improve early detection and long-term outcomes.

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