



**Alexandra Faye Taylor RVN CertSAN
ISFMDipFN & AdvCertFB**

Alex qualified as a veterinary nurse in 1997 and has worked in both first opinion and referral small animal practice. Alex is especially interested in feline nursing and has completed both the ISFM feline nursing certificate and diploma with distinction. Alex recently finished studying towards the ISFM advanced certificate in feline behaviour and has just started studying towards gaining her advanced diploma applied animals behaviour (feline). Alex currently works as a locum RVN and runs her own company 'The Cat Nurse' where she works as a locum RVN and offers CPD about feline nursing and behaviour. Alex volunteers for her local Cats Protection branch, helping to raise money for local cats in need. Alex has a particular interest in feline behaviour, nutrition and stress related diseases in feline patients. Alex has been a member of the BVNA Council since 2018. Email: alexthecatnurse@gmail.com

Literature review on the handling and restraint of cats in practice and its effect on patient welfare

**Alexandra Faye Taylor RVN CertSAN ISFM
DipFN & AdvCertFB**

ABSTRACT: The handling and restraint of feline patients in practice has been rather a 'hot topic' over the last few years. More emphasis is being placed around providing not just good clinical care, but also consideration of emotional needs of feline patients. Slowly there is more evidence and literature becoming available for veterinary nurses to explore, meaning the concept of cat-friendly handling and restraint is gradually becoming more commonplace in veterinary practice.

Keywords: species-specific; low-stress; welfare; cat handling and restraint

Introduction

Since the introduction of the International Cat Care 'cat friendly clinic' accreditation programme in 2012, there has been much discussion and emphasis centred on providing calm, relaxed and stress-free environment for feline patients (International Cat Care, 2019). Knowledge of species-specific behaviours, needs and individual preferences are essential when assessing patients in practice (Ryan, 2018). This knowledge can be applied to the appropriate handling and restraint of cats, which is vital in veterinary practice if the good welfare of feline patients is to be maintained (Rodan et al., 2011).

The negative emotions experienced by cats exposed to novel sights, sounds and smells in unfamiliar surroundings can make the entire experience of visiting a veterinary practice distressing for them (Carney et al., 2012).

If the veterinary staff are not sensitive to the needs of feline patients, and if cats are not handled in a gentle and considerate way it can further impact on the cat's ability to cope in a veterinary setting (Allbrook, 2013). The consequences of rough or unsympathetic handling from staff are manifold, causing the cat to experience negative emotions such as anxiety, fear, and frustration (Ellis, 2018; Finka,

2016). This can affect patient compliance, clinical findings (Cannon & Rodan, 2016) and ability to recover from illness or injury as well as increasing the likelihood of aggressive behaviour from the cat at its next visit (Williams, 2016).

Despite the abundance of material available focussing on the advantages of low-stress handling of cats in practice (Rodan et al., 2011) using the 'less is more' approach has not been adopted by all veterinary staff.

Literature review

In order to fully understand the behaviour of the domestic cat one must first look at its ancestry (Cats Protection, 2017). In the book 'The Behaviour of the Domestic Cat' (Bradshaw et al., 2012) an entire chapter has been dedicated to explaining how the domestication of cats came about and how 'In behavioural terms, domestication has probably had less effect on the cat than any other domestic animal' (Bradshaw et al., 2012, p. 7). Considering the ancestry of all of our domestic cats lies with the African Wildcat (*Felis S lybica*), a cat known to actively defend its territory and live a solitary lifestyle (Driscoll et al., 2009) it is clear to see why moving a domestic cat out of a familiar place i.e. its home and transporting it to somewhere unknown can lead to feelings of anxiety and distress (Ellis et al., 2013).

This independent nature, lack of true domestication and need to feel in control of its environment can help explain why cats can sometimes be challenging to examine and treat in a veterinary environment (Finka, 2016; Bradshaw, 2016).

Veterinary nurses are animal advocates, the voice of their patients who cannot speak and they play a significant role in animal welfare (Yeates, 2014). Taking into consideration the importance of not just the physical health, but emotional health and behavioural needs of patients is crucial for patient welfare in practice (Ryan, 2018).

One of the responsibilities of veterinary nurses is to monitor feline patients for signs of anxiety, fear, pain, and distress. However, escalation of negative emotions can lead to an increased risk of injury to staff, so it would be advantageous for all team members to be aware of appropriate handling techniques, not just their patients, but for their own personal safety too (Taylor, 2016).

Clinical Animal Behaviourist Trudi Atkinson covers a section on the handling and restraint of feline patients in her book 'Practical Feline Behaviour: Understanding Cat Behaviour and Improving Welfare' (Atkinson, 2018). In this book Atkinson states that 'Minimal, gentle restraint and handling should always be employed' (Figure 1) (p. 155). Atkinson also highlights another important point regarding scruffing cats in this book, mentioning how it can be painful and trigger fear in feline patients. This makes defensive aggression



Figure 1. Handle gently.

more likely and future visits to the clinic more difficult.

The AAFP and ISFM Feline Friendly Handling Guidelines were published in 2011 to try and encourage veterinary professionals to consider the challenges that a cat may face throughout its journey through the clinic (Rodan et al., 2011). The guidelines are particularly useful as they show photographic evidence of the facial expressions and body postures of a cat that is in the early stages of fear and anxiety. These are often overlooked due to being subtle and more difficult to assess in comparison to more social species such as the dog (Heath & Bowman, 2001). There is clear and specific information on how staff can interact with a cat during its visit to a veterinary clinic, with particular attention being paid to the significance of using the 'Go slow to go fast' approach. It states that 'For most cats using the slow approach is more efficient at achieving the results you want' (Rodan et al., 2011, 369).

Both the AAFP & ISFM Feline Friendly Handling Guidelines and the Feline Behavioural Health and Welfare book focus on treating each cat as an individual, assessing the cat's response to handling and restraint and taking breaks where necessary should the cat become too aroused. Chemical restraint is also advised for cats who do not respond to cat-friendly handling or anxiolytic medication (Rodan et al., 2011; Yinn, 2016).

The AAFP & ISFM Feline Friendly Handling Guidelines are centered on allowing the cat to feel in control of what is happening to it at the clinic, taking into account each cat's needs and preferences. This is also mentioned in articles such as 'Cat-friendly handling, why is it important?' (Cannon, 2018). Additional practical advice is given in the BSAVA Manual of Feline Practice, where there is an entire chapter dedicated towards 'The Cat Friendly Clinic' (Schlerk, 2014). There is some good practical advice given in the BSAVA Manual of Feline Practice, including how to get a cat out of its carrier safely and without causing distress. The book highlights that cats should never be shaken or tipped out of a carrier, but allowed to come out in their own time and examined inside the carrier, with the lid removed if need be (Figure 2) (Schlerk, 2014).

Several other practical tips are given in the AAFP & ISFM Feline Friendly Handling

Guidelines (Rodan et al., 2011), including information on how to approach, examine and perform procedures such as administering medication, take blood samples and perform a cystocentesis, all in such a way that the cat is allowed to be in a position of its choosing to prevent resistance and allow facilitation of necessary procedures (Figure 3 and 4).

The use of scruffing as a means of restraint in cats is not recommended in the AAFP and ISFM Feline Friendly Handling Guidelines (Rodan et al., 2011) or in the books Feline Behavioural Health and Welfare (Rodan & Heath, 2016), BSAVA Manual of Feline Practice (Harvey & Tasker, 2014) and Cats Protection Behaviour Guide (Cats Protection, 2017). 'Scruffing cats' is also mentioned in a more recent study (Moody et al., 2019) 'Getting a grip: cats respond negatively to scruffing and clips'. Due to the findings in this study, the authors have recommended that full body and clip restraint are not used, and that scruffing is avoided.



Figure 2. Examine inside carrier.

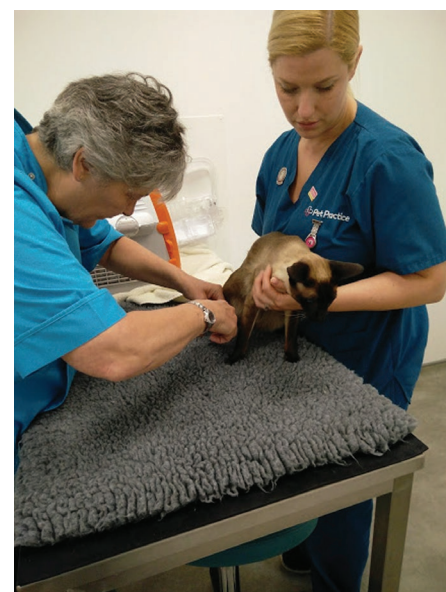


Figure 3. Allow cat to position itself.



Figure 4. Use distraction methods.

Reasons given for not scruffing cats include:

- Discomfort/pain caused by the handler during the scruffing process
- Scruffing is interpreted negatively by the cat as it is used during mating and fighting as a means of control
- It is only used by a queen to move her kittens to a place of safety – not as a form of control. This is usually in the kittens first few weeks of life, so they weigh much less than an adult cat and have a more flexible neck
- Scruffing does not allow the cat to feel in control, causing further distress in an environment where the cat may already feel vulnerable
- Increases the likelihood of injury to staff
- Exacerbates feelings of anxiety, fear, and frustration, which may influence how the cat behaves at the next visit
- Breakdown in the relationship between staff and the patient, making examinations and treatment difficult
- Other methods such as a towel wrap are recommended as a less stressful and more effective means of restraint for cats
- Scruffed cats are more likely to demonstrate negative behavioural and physiological responses compared to cats that are restrained more passively

The scruffing of cats and the use of 'clipnosis' is also mentioned in the Finka (2016) article 'A practical guide to help reduce stress in cats in the veterinary clinic' Finka highlights that although scruffing or clipnosis may help to temporarily immobilise a cat, patient body language and posture during such techniques indicate that stress levels have risen, therefore one must assume patient welfare is compromised.

Another study by Moody et al. (2018) compared the negative responses of cats restrained using either 'passive' or 'full body' techniques during a physical examination. Each of the forty seven cats used in the study was assessed for behavioural and physiological responses during three different phases of the examination, placement into restraint, restraint and post restraint.

The results of this study were interesting, as it clearly showed that cats restrained using the 'passive' method displayed *less negative behavioural and physiological responses* that those that were held in 'full-body restraint'

In this study passive restraint was described as:

Held lightly, with the least amount of restraint possible, in the position of the cats choosing and allowing movement of head, body and limbs (p. 97).

Full body restraint was described as:

Held on its side with its back against the handler, while the handler grasps the front and back legs, with the forearm across the cat's neck. The cat is allowed little or no movement of its head, body, and limbs (p. 97).

This study showed that cats held in full-body restraint were much more likely to struggle when being placed into position. These cats had increased respiration rates and likelihood of facial changes and body language associated with anxiety, fear, and hyperarousal. Signs such as lip licking, increased pupil diameter and ears positioned sideways or backward were observed and recorded. The cats held in full-body restraint also attempted to get away as soon as possible when they were released compared to those in the passive restraint group (Moody et al., 2018).

Handling cats in pain

This topic has been covered in several articles and books. Each cats experience of pain as an emotion can be different, but cats are known to be 'masters in disguise' and excellent at hiding pain (Ellis, 2018). The article 'How to handle a cat in chronic pain' (Rudd, 2019) highlights the importance of taking into account the cats condition when choosing a means of restraint. This is especially important when handling older cats that are more likely to be arthritic. Rudd (2019) also discusses how cats with chronic pain may

find it difficult to keep still during an examination, so therefore a large and soft bed should be provided for the cat to sit or stand on during this time. Other areas highlighted in this article are:

- Care when manipulating legs in sedated or anaesthetised patients (may cause pain on recovery)
- Not lifting the head too high for jugular blood samples or over-extending the leg for IV cannula placement
- Consider using peripheral veins for blood sampling of cats with chronic dental pain

All of these points should be taken into account by veterinary professionals who want to ensure the welfare of older feline patients is not compromised during handling and restraint for procedures.

The book 'Feline Behavioural Health and Welfare' has an entire chapter (21) named 'Handling the Cat that is in Pain' (Rodan & Heath, 2016). This chapter gives the reader extensive information and knowledge of a cat's perception of pain, why it impacts on welfare, what veterinary professionals can do to recognise pain, as well as how this may affect handling techniques. As with the article by Rudd (2019) emphasis is placed on gentle handling of cats for examinations (proper handling of cats with degenerative joint disease (DJD) is also mentioned here) and this book uses plenty of photographs to demonstrate how to handle and restrain painful cats for various tasks and procedures.

Rodan and Heath (2016) also argue that 'Scruffing the cat, stretching the body, or holding onto the hind legs to shove a cat back into the carrier can cause back and/or limb pain and must be avoided' (p.295). Administration of adequate analgesia prior to handling (or indeed when a cat is demonstrating any signs of pain) is also discussed in this book. It is also advised that any known painful areas should be examined last and only after any given analgesia has had the chance to reach its full effect. This again acknowledges that it is vital to work slowly and be patient when handling cats, ensuring that they are comfortable and their wellbeing and health are not compromised is the responsibility of all veterinary professionals.

Conclusion

It is well known that cats can suffer from the 'white coat effect' (Belew et al., 1999). This is something that needs to be reflected upon

by veterinary professionals when cats are handled and restrained in practice.

Cats are very different from humans and other more social species such as dogs. The canine brain is already adapted for social living and has developed over a much longer period of time in comparison to the brain of the domestic cat (Bradshaw et al., 2012). This means that feline patients have very different and specific needs compared to other species. These needs should be understood and applied when veterinary staff are handling or restraining cats in practice. Failure to do so can result in fear-aggression and situations where a cat may feel so under threat it feels it has no option but to lash out and attack, causing injury to the handler or itself (Yinn, 2016). Furthermore, cats that have had a poor experience at a clinic due to harsh or rough handling by staff are far more likely to react negatively during further visits, so much so that they may become impossible to examine or treat (Finka, 2016). This has a knock-on effect for the ongoing health of cats, as owners may avoid future visits due to the distress caused to the cat and themselves (Rodan, 2010).

If veterinary professionals want to give cat owners and their cats the best possible experience at the clinic, appropriate handling and restraint of cats is essential. By working around feline patients and handling them in a calm and non-restrictive way it is entirely possible to be able to examine and treat most cats easily without causing distress (Lloyd, 2017). There is sufficient, informative and reliable literature available nowadays to enable veterinary nurses to do just that.

Recommendations for further study

Due to the abundance of accessible literature currently available it is easy for veterinary professionals to learn more 'cat-friendly' techniques for the handling and restraint of cats in practice (Rodan et al., 2011). However, so far only a few actual studies of the effects of handling on feline patient welfare have been carried out. It would be beneficial for further studies, such as 'Validating negative responses to restraint in cats' (Moody et al., 2018) to be completed as further information about how cats react both behaviourally and physiologically to different kinds of handling styles could be obtained.

Something else to consider is that assessment of feline behaviour is very much in its infancy (Ellis, 2018), which can make evaluating the effects of different handling and restraint techniques more challenging. Moreover, several factors may influence a cat's behaviour

towards people, such as genetics, early socialisation and ongoing experiences (Bradshaw et al., 2012). These factors will be different for each cat, making studying their behaviour towards people more challenging.

Recommendations for veterinary practice

The article 'Minimising stress for patients in a veterinary hospital: Why is it important and what can be done about it?' (Lloyd, 2017) states that 'Veterinary staff should be aware of how their interactions affect patients, and learn to choose the best method of control while working in a calm and positive manner' (p. 7) as well as voicing concerns about rough handling of patients and how it may negatively impact on a patient welfare.

Most veterinary professionals are aware of the effects of rough or inappropriate handling, yet still, perhaps due to time constraints and pressure from colleagues to 'just get things done' animals (especially cats) are not always handled in the best way to ensure stress levels are kept as a minimum.

It is important to remember that whilst working in a practice environment is just an everyday occurrence for most veterinary professionals, for the cat it can be a frightening experience (Finka, 2016). Cats need to feel safe (Cats Protection, 2017) and it is the responsibility of all veterinary professionals to look after the emotional and physical health of their patients (Ryan, 2018) This includes following a more 'cat-friendly' approach to the handling and restraint of feline patients (Rodan et al., 2011).

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