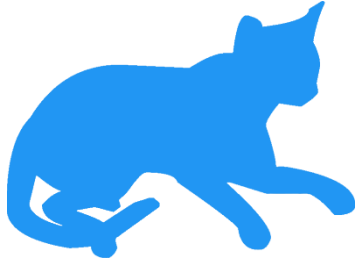
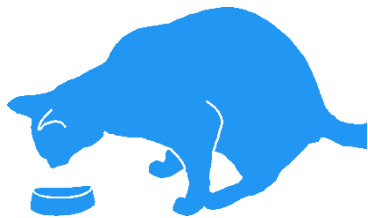


DOES A CAT HAVE CHRONIC PAIN?

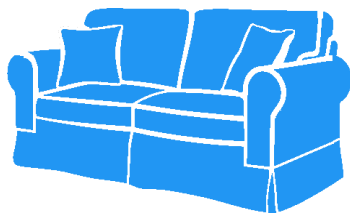
Cat chronic pain is often missed due to subtle signs. Symptoms such as limping are only seen in acute pain.
Does a cat display these behaviours or have these risk factors?



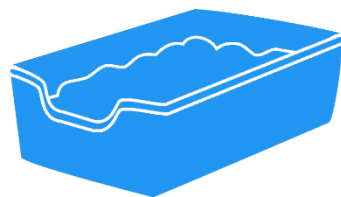
Elderly, Diabetic or has Cancer?



Eating with Bottom Raised instead of Sitting?



Reduced Use of Elevated Surfaces and Stairs?



Not Using their Litterbox?



Fur is Dull and Dirtier than Usual?

For a Digital Version
and Additional
Information:



maddy.michevan.id.au/cat-chronic-pain.pdf

CONTENTS

Prevalence	1
Causation	2
Degenerative Joint Disease (DJD)	2
Symptoms	2
Eating with Bottom Raised instead of Sitting	2
Reduced Use of Elevated Surfaces and Stairs	3
Not Using their Litterbox	3
Fur is Dull and Dirtier than Usual	3
Other Symptoms	3
Diagnosis	5
Acknowledgements	5
Summary	6
Recommended Further Reading	6
References	7
Picture Sources	8

Prevalence

The number of cats experiencing chronic pain is expected to rise due to increasing life expectancy.

However, chronic pain

in cats is currently underdiagnosed. It is not fully known how widespread chronic

pain in cats is. This has led to a widespread reduction in cat health and welfare, and can lead to negative clinical outcomes, including unnecessary euthanasia.

It is not fully known how widespread chronic pain in cats is.



Underdiagnosed chronic pain can be attributed to multiple factors:

- 🐾 Cats are prey animals so instinctively hide their pain as to prevent being targeted by predators.
- 🐾 Chronic pain has a gradual onset and gradual increase in intensity. So the progressive, subtle changes in behaviour can easily be missed.
- 🐾 The signs of pain in cats are different and not often linked to pain.
 - 🐾 For example, limping is rarely seen in chronic pain. This makes screening and diagnosing chronic pain difficult.

Causation

Some diseases have an increased risk of resulting in chronic pain. Cats with the following diseases need to be monitored for chronic pain:

- 🐾 Cancer
- 🐾 Diabetes
 - 🐾 **Clinical Term:** Diabetes-induced neuropathy

Diseases of the following organs and systems are also associated with increased risk of chronic pain:

- 🐾 Dermatological (skin)
- 🐾 Gastrointestinal (digestive) tract
- 🐾 Ocular (eyes)
- 🐾 Oral & Periodontal (mouth)
- 🐾 Reproductive system
- 🐾 Urinary system

Other conditions are usually diagnosed through the identification of pain. These include Persistent Post-surgical Pain, Feline hyperesthesia syndrome and Degenerative Joint Disease.

Degenerative Joint Disease (DJD)

The most common form is osteoarthritis. DJD is the most prevalent cause of chronic pain. It is more common in older cats, so occurrence is expected to rise with the increasing life expectancy.

DJD is often diagnosed through the identification of chronic pain, so it is frequently missed. Due to the higher prevalence in elderly cats, it is recommended to assume all senior cats have DJD (See Figure 1) and be closely monitored for the symptoms of chronic pain.

Approx. 90% of all cats have Degenerative Joint Disease



% of Cats with Degenerative Joint Disease (DJD)

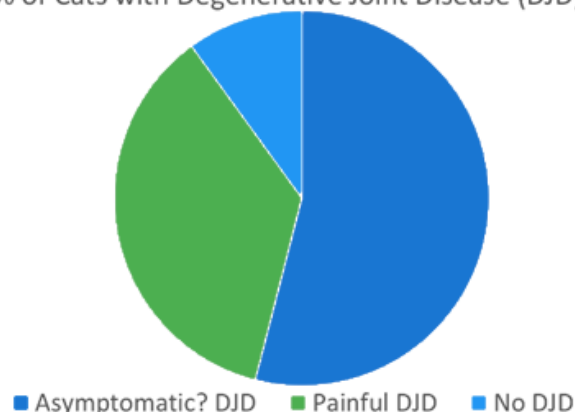


Figure 1 It is estimated that 90% of cats have radiologically detectable DJD, with a minimum of 40% of these cats experiencing pain (green). It is unknown if the rest are experiencing pain (dark blue).

Symptoms

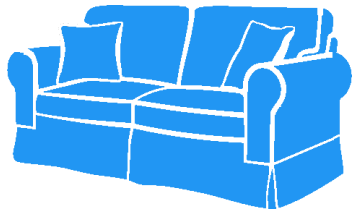
Chronic pain has a gradual onset and gradual increase in intensity. So the progressive, subtle changes in behaviour can easily be missed. There are a wide variety of symptoms that can vary a lot between cats. The following are the most apparent signs:

Eating with Bottom Raised instead of Sitting



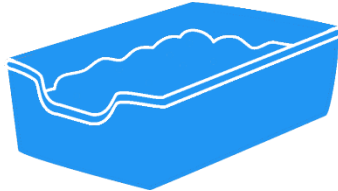
This is due to the strain on the spine while sitting and the dipping of their head towards the ground and is the most obvious sign when the cat is calmly eating.

Reduced Use of Elevated Surfaces and Stairs



Chronic pain causes a reduction in movement and mobility, which causes less jumping, running, and playing. This is most apparent when cats are hesitant to or less often use elevated surfaces such as furniture and stairs.

Not Using their Litterbox



Cats in chronic pain may struggle to enter and exit their litterbox, so may urinate or defecate near or in front of it instead.

Fur is Dull and Dirtier than Usual



This is due to a reduced ability to groom themselves properly. This may not necessarily mean a reduction in grooming. Some cats may spend the same amount or more time grooming but are not mobile enough to perform it properly.

The cat's coat can also be greasy and tangled, especially with long-furred cats. Their claws can be dirtier than usual as well. Excessive grooming, especially of certain areas of body can also occur. This can cause bald spots or fur discolouration.

Other Symptoms

Certain diseases are known to cause specific symptoms:

- 🐾 **Periodontal disease:** Decreased appetite, pawing at mouth, exaggerated chewing and licking, sudden vocalisation which can happen after eating.
- 🐾 **Persistent Post-surgical Pain (PPP):** Limping, back pain, changed litterbox habits, licking or chewing sore areas, and an aversion to those areas being touched.
- 🐾 **Diabetes-induced neuropathy:** Reduced jumping, resenting limbs being touched, excessive licking of paws, paw fur discolouration or bald spots.
- 🐾 **Feline hyperesthesia syndrome:** Skin rippling on spine (indicating muscle spasms), pain upon touch, excessive grooming, bald spots, self-mutilation.

Lower quality fur does not necessarily mean a reduction in grooming.



Table 1	known symptoms of chronic pain
Decreased Mobility	Stiff and abnormal gait, difficulty jumping, difficulty getting up or lying down, reduced running, walking, roaming, playing, claw sharpening or hunting
Socialisation	Owners report 'Grumpiness,' less willing to interact with owners and others, resent being touched (especially back or limbs), increased seeking of inclusion, sudden vocalisations
Grooming	May increase or decrease, but fur and claws are not maintained well. May be dirty, dull, greasy, or tangled.
Food	Appetite may increase or decrease. If the pain is related to the mouth or jaw can show pawing of mouth and difficulty eating. Bottom may be raised instead of sitting, while eating (see Image 1).
Rest	Generally Increases. Not obvious due to cat's small size and normal withdrawal and rest behaviours. May change from sleeping on elevated surfaces such as furniture to on the floor instead (See Image 2). May also seek out heat and warmth more often (See Image 3).

Lameness is often not present or apparent in chronic pain.

Jumping difficulty in general, or to certain heights is usually due to weak hind legs. Cats may also change their strategy for reaching an elevated surface.



Image 2 A cat that normally sleeps on elevated surfaces such as furniture may sleep on the floor instead. *Courtesy of Madelyn McLean*

Image 1 (a) A cat with DJD eating with bottom raised instead of sitting. (b) the same cat sitting more comfortably when food is on a platform. *Courtesy of Madelyn*



Image 3 A cat may seek out warmth more often to relieve pain. *Courtesy of Evan McLean*

Diagnosis

Diagnosis within the vet clinic is difficult. Cats are often stressed at the clinic and usually hide their pain-related behaviours. The best method for identifying these behaviours is asking owners. Owners typically become skilled at identifying pain and changes in pain when aware of the symptoms.

Chronic pain should be considered when other likely conditions are ruled out or the cat has a condition that increases the risk of chronic pain (See *Causation*).

Common comments from owners of their cats that could be signs of chronic pain include 'grumpy,' 'lazy,' 'getting old' or 'stressed,' especially when reporting a change in behaviour.

In situations where pain is suspected, an analgesic challenge can be performed. Administering pain medication and monitoring behaviour can lead to a positive diagnosis.

The best method for identifying these behaviours is asking owners



veterinarian about the best options or see *Recommended Further Reading* for more information.

Acknowledgements

This guide is a pre-graduate project.

The author thanks the teaching staff at Federation University for their guidance and advice.

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The author thanks all the researchers and medical teams working towards improving cat welfare and outcomes. This project is made with the aim to further build upon this work.

The author gives permission for anyone to distribute this guide and poster for the purpose of education and raising awareness.

Author: Madelyn McLean, 2023

SUMMARY

- 🐾 Chronic pain is difficult to diagnose. It is not fully known how widespread it is.
- 🐾 The signs of chronic pain are subtle and easy to miss. Limping is not a common symptom.
- 🐾 Multiple diseases are known to cause chronic pain. Cats diagnosed with these diseases must be monitored.
- 🐾 It must be assumed elderly cats have Degenerative Joint Disease and they must be closely monitored for chronic pain.
- 🐾 Each cat can display a different variety of symptoms.
- 🐾 The most apparent symptoms include:
 - 🐾 Eating with bottom raised instead of sitting
 - 🐾 Reduced use of elevated surfaces and stairs
 - 🐾 Not using their litterbox
 - 🐾 Fur is dull and dirtier than usual
- 🐾 Diagnosis involves interviewing owners regarding signs of chronic pain.

Recommended Further Reading

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Picture Sources

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