

JOINT DISEASE, ARTHRITIS AND PAIN



Presqu'île Animal Hospital

Types of Pain

Acute Pain: occurs with inflammation and healing after an injury and can last for up to 3 months. It can be caused by injury, trauma, surgery, and acute medical conditions and diseases. Acute pain generally begins suddenly and doesn't last long.

Chronic Pain: pain that lasts beyond the normal healing time or pain that lasts in conditions where healing has not or will not occur.

Persistent Pain: Pets with persistent pain may need palliative care. Palliative care is the all-encompassing approach that provides dogs and cats, who have a disease that is not responsive to curative treatment, with a plan to provide an improved quality of life with pain control being the principal feature.

How do we diagnose it?

There are several very common misconceptions about pain:

- 1.If they aren't crying or whining, they aren't in pain
- 2.If they are still eating and drinking, they aren't in pain
- 3.If they are limping, that does not indicate pain
- 4.Pets slow down as they age, that does not indicate pain

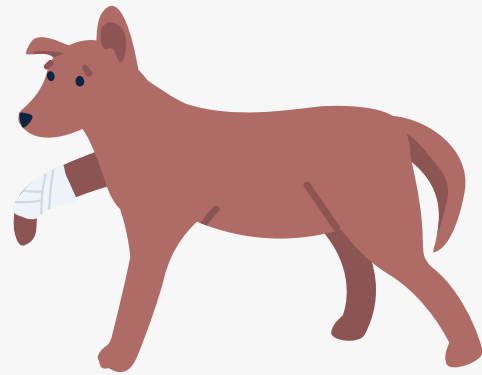
Unfortunately, pain can be difficult to assess, especially when we are managing a chronic condition or chronic pain. It is important to remember that osteoarthritis, joint disease, degenerative joint disease, spondylosis, dental disease and other painful conditions are progressive. The pain starts low and increases over time. The pets adjust to the discomfort and accept it as their new normal.

Knowing all of this, here are some common symptoms of pain:

- Hesitating before jumping, climbing or stretching
- Limping or favoring of limbs
- Slower in the morning and more active in the evening - or vice versa
- Slow to get up from resting/sleeping position
- Lesser appetite or less willing to chew. Suddenly swallowing kibble instead of chewing it (difficult to assess in cats sometimes)
- Changes to body position or stance when urinating/defecating. Refusal or inability to use litterbox.

In addition to these symptoms , we use client questionnaires in combination with in-hospital assessment to diagnose pain. Depending on the body system, specific tests will be required or recommended. For joint and musculoskeletal pain in the neck or spine, we will perform an orthopedic exam which includes range of motion tests for the joints. Radiographs are recommended, especially for neck and back pain to look for spondylosis. We use the COAST assessment tool to help determine the grade of Osteoarthritis present as well.

There is pain associated with common conditions such as ear infections, dental disease, skin conditions, renal disease etc - each of these is assessed as part of a physical examination. These conditions are somewhat outside the scope of this document, however many of the medications used are the same. **Dental pain especially is very chronically overlooked and under-treated.**

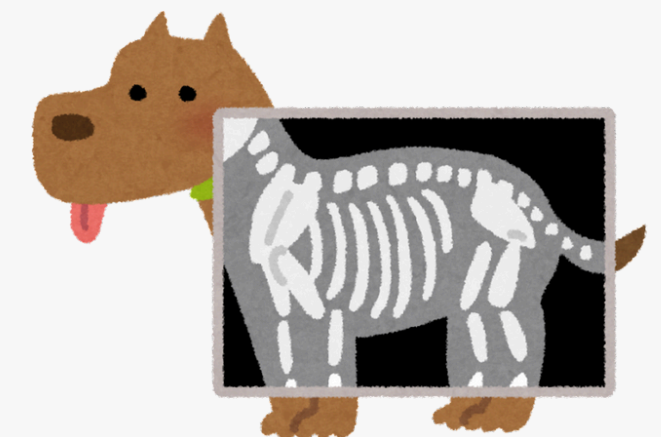


A special note about cats

Degenerative joint disease (DJD), also known as feline arthritis, is an extremely common, chronic, painful disease in cats, with as many as 92% of all cats showing some signs of this disease. It is also one of the most significant and under-diagnosed diseases in cats.



<https://catfriendly.com/keep-your-cat-healthy/know-cat-pain/>



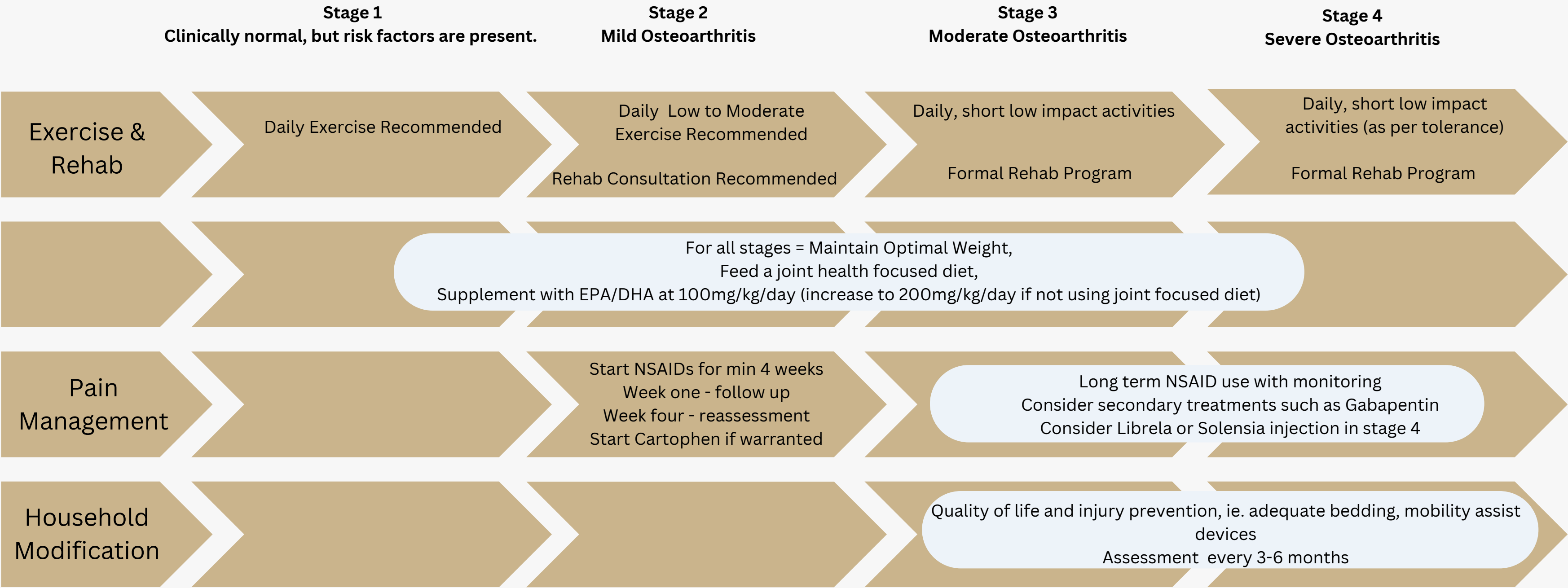
Osteoarthritis/Degenerative Joint Disease

The joint cartilage in freely moving joints may degenerate over time, leading to loss of joint movement and, in many cases, pain. This condition is characterized by thinning of cartilage, buildup of fluid within the joint, and the formation of bony outgrowths around the joint. Joint degeneration can be caused by trauma, infection, the body’s own immune system, or malformation during development. This leads to inflammation of the joint membrane, continued cartilage destruction and inflammation, and abnormal joint function.

Signs of osteoarthritis include lameness, joint swelling, wasting away of muscle, and thickening and scarring of the joint membrane.

COAST - Canine OsteoArthritis Staging Tool and Recommendations

The below graphic contains information from the Canadian OA Treatment Guidelines Infographic

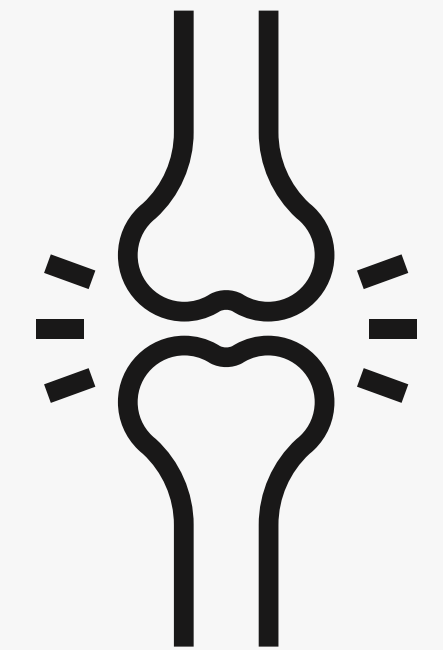


Other Common Musculoskeletal Disorders

Diseases of the musculoskeletal system most often affect the dog’s ability to move. How severely movement is impaired depends on the type and severity of the problem. Skeletal and joint disorders are the most common, but problems in the musculoskeletal system can also indicate diseases of the muscles, neurologic problems, toxins in the body, hormonal abnormalities, metabolic disorders, infectious diseases, blood and vascular disorders, poor nutrition, and birth defects.

Joint disorders may be caused by trauma to the joint, long-term inflammation, developmental problems, or infections. Traumatic injuries may produce short-term consequences such as dislocation, fracture, or the distortion (instability) of a joint. More long-term effects may include arthritis or the rupture of nearby ligaments or membranes.

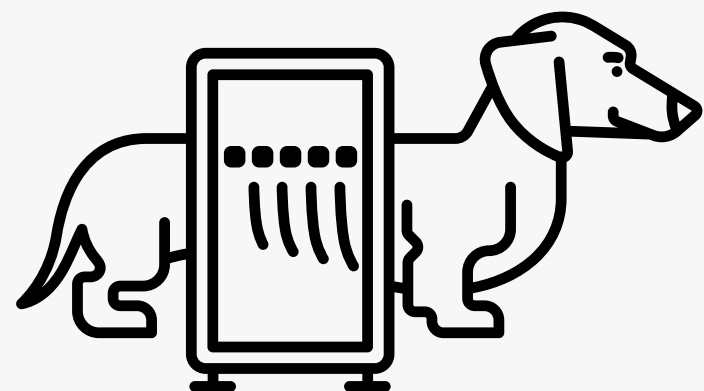
Chronic or long-term inflammation is most commonly seen in joints associated with movement. The effects of long-term inflammation can be complicated. Any joint injury changes the composition and amount of fluid inside the joint, which affects the amount of pressure on the connecting bones.



Hip Dysplasia

Hip dysplasia is an abnormal development of the hip joint in large dogs. It is characterized by a loose joint and subsequent degenerative joint disease (osteoarthritis). Excessive growth, exercise, nutrition, and hereditary factors affect the occurrence of hip dysplasia.

The signs associated with hip dysplasia vary. Lameness may be mild, moderate, or severe, and is worse after exercise. The dog may walk with a “bunny-hopping” gait. A loose joint, reduced range of motion or stiffness of the joint, and a grating sound and pain during full extension and bending of the joint may be present. X-rays are useful in determining the degree of arthritis and planning treatments.



Luxating Patella (Loose kneecap)

Patellar luxation, a hereditary disorder in dogs and cats, is characterized by development of the patella outside its intended groove in the femur.

Clinical signs are variable and based on the severity of luxation. Animals of any age may be affected. Affected animals are lame or move with a skipping gait. Palpation of the stifle joint reveals displacement of the patella.

Patellar luxation can be classified according to the level of severity.

Intervertebral Disk Disease in Animals

There are 3 types of IVDD

1. Degeneration and subsequent herniation of the intervertebral disk results in compression of the spinal cord, spinal nerve, or nerve root. Chondrodystrophoid breeds of dogs (eg, Dachshund, French Bulldog, Beagle, Shih Tzu, Lhasa Apso, and Pekingese) are most commonly affected, with Miniature Dachshunds having a lifetime prevalence of ~20%.
2. Large-breed dogs can suffer fibroid disk degeneration as they age. This type of degeneration predisposes to a slowly progressive protrusion of the disk. Clinical signs of intervertebral disk disease typically develop at >5 years old and consist of slowly progressive ataxia and paresis.
3. A third type of intervertebral disk herniation is acute extrusion of a healthy, nondegenerate disk. It occurs most commonly during exercise in relatively young dogs.

Cranial Cruciate Ligament Injury

Rupture of the cranial cruciate ligament is most frequently due to excessive trauma and a possibly weakened ligament secondary to degeneration, immune-mediated diseases, or conformational defects (straight-legged dogs). Instability of the stifle joint after rupture of the cranial cruciate ligament can lead to cartilage damage, swelling and arthritic changes.

Other Painful Conditions

While this page is addressing two of the most common and painful issues we see, this is by no means a complete list.

Dental Disease

Stomatitis

Gingivostomatitis is a debilitating feline dental disease marked by severe and chronic inflammation of a cat's gingiva (gums) and mucosa, the moist tissue that lines its oral cavity. This condition is extremely painful. The body is reacting negatively to the normal plaque coating and teeth. The most recommended course of action is to extract all of the cat's teeth to prevent the body from continuing to react. Pain control is important leading up to surgery to allow cats a reasonable quality of life.

Resorptive Lesions

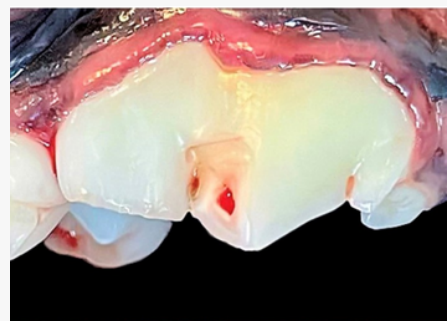
Tooth resorption is a common condition, affecting an estimated 20 percent to 60 percent of all cats and close to three-quarters of those five years of age and older. These lesions occur when the dentin in a tooth erodes and becomes irreparably destroyed. This is a painful condition as the nerve, pulp, root and gums become affected. These teeth often fracture, fall out or become heavily diseased.

Tartar

Tartar forms over time as the normal plaque on the teeth mixes with bacteria and calcium to harden and form layer on layer of hardened debris. Tartar will continue to accumulate and will push gum tissue away from the teeth and jaw bone. As bacteria is introduced below the gumline, the jawbone begins to recede, resulting in infection, loose teeth and pain.

Fractured or Loose Teeth

Dogs and cats are both commonly diagnosed with loose and fractured teeth. Chewing bones, antlers, ice cubes etc will break the crowns of the teeth, resulting in exposure of the pulp within the tooth. As the tooth dies, the pain is quite severe and the risk of infection is high. When teeth are loose or falling out, that is a painful mouth and pain must be controlled every day until infected teeth are removed.



Chronic Ear and Skin Infections

Acute or chronic ear infections are both painful conditions. The good news is that most of our ear treatments contain antinflammatories to help manage that. However, in some cases, additional pain medication is required, especially when we have complex infections with multiple bacteria present, when we have ulceration or severe damage to the skin inside the ear canal or when the infection has been present for a long time. Treating infections thoroughly and managing underlying allergies are an important part of managing ear pain.



Infections in the skin cause thickening, swelling, ulceration and overall damage to the skin and tissues. While our primary concern may be the itch, there is also pain present and this needs to be considered and managed. Topical and oral treatments are used both for management of the skin condition and for pain.

Environmental Management

Introducing tools for mobility is most effective when done early.
Consider some of the options below for your pets.



Mats to prevent slipping and allow more confident movement



Low litter boxes allow senior cats to walk in and out of their box more easily.



Raised food bowls for both dogs and cats allow for a more supportive posture when eating and drinking.



Slings and supports to help pets up from lying down, climb stairs or get in and out of vehicles.



Stairs to provide a safer way for pets to sit up higher or get on and off furniture (recommended for preventing injury in small dogs as well)



Toe grips or pad grips that are worn on the nails and feet to help prevent slipping on floors.



Physiotherapy, Massage, Acupuncture and Rehab are all very helpful in managing joint pain.
Ensure you choose a medical professional with proven experience and thorough understanding of your pet's condition.

Diagnostics

This is a very short summary of the primary diagnostics for joint pain. There are other options out there and we are happy to discuss them.



4Dx and Lyme Testing

The 4Dx is a test we use to look for Heartworm, Lyme disease, Anaplasmosis and Ehrlichia. The primary reason for testing for Lyme disease in relation to pain is that Lyme can cause shifting lameness and pain. We do not treat all patients who have been exposed to Lyme, because it is estimated that 5-10% of dogs who are exposed require treatment, but it is always something we need to consider.



Radiographs



We offer dental radiology and full body radiology. We will often use radiographs to assess joint health and guide our decisions for treatment and management options.



Dental radiographs are used to assess the health of the tooth roots and guide our decisions for extraction or treatment of the teeth. This is an essential part of managing dental pain.

Nutrition and Weight Management

The role of nutrition in managing musculoskeletal disorders is typically broken into 2 main components Weight management and Joint Support

Keeping pets at a healthy weight is essential for maintaining a good quality of life and contributes to reducing the risk of joint injury. It is also very important for pets with existing joint disease to reduce the pressure on the joints as much as possible, and that means maintaining a lean body weight.

It has been proven that maintaining a lean body weight can increase life span by up to 2 years.

(Purina Life Span Study)

There are also nutrition options that include Omega 3 Fatty Acids at a therapeutic level, which helps to reduce the need for additional supplements.

Purina JM, Purina JM + OM, Hill's j/d and Royal Canin Mobility are the main diets we recommend for joint support.

When using nutrition to achieve weight loss, it is incredibly important to use a diet that is built for weight loss and not just weight management. There are very few of these available. We support the use of Purina OM Overweight Management, Hill's Metabolic and Royal Canin Satiety.

There are also some combination diets built specifically to address both joint health and weight loss, specifically because this is such a common condition in our pet population. We recommend Purina Joint Mobility + Overweight Management and Royal Canin Mobility + Satiety.

We use Body Condition Scoring and Muscle Condition Scoring to help determine a pet's ideal weight and feeding amounts. You can monitor this at home as well. There is a page dedicated to this at <https://www.petobesityprevention.org/pet-weight-check>

There are also helpful videos demonstrating this on Youtube.

We are happy to help calculate feeding amounts and discuss nutrition options with you.

Weight checks are always no charge and a good opportunity for a happy visit.

Feeding Overweight Pets

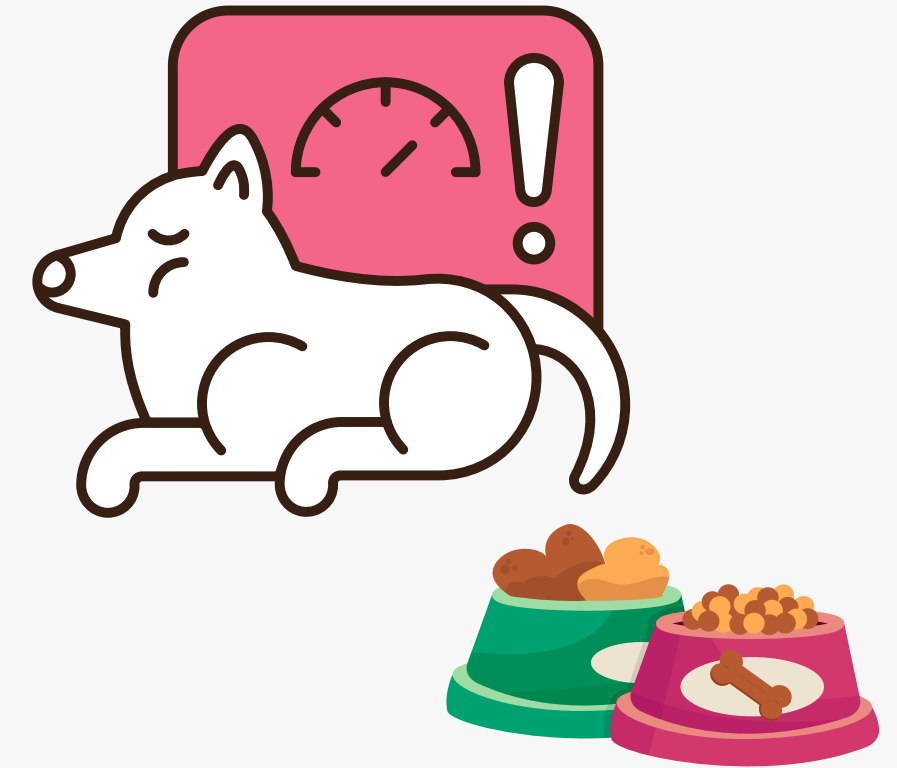
It is important to measure food and use feeding times as a time for mental stimulation and physical activity. Using food puzzles, slow feed bowls, games etc are helpful for our pets' cognitive health and also their physical health. There are many options out there for food puzzles - you can make your own, use items around your home or purchase them. Always keep your pet's individual mobility and cognitive abilities in mind when choosing your food puzzles. We strongly recommend replacing food bowls with a bit more of a challenge for all dogs and cats.

Here is a link to some information about using food puzzles:

<https://thehealthierpetwithin.ca/the-hunger-games/>

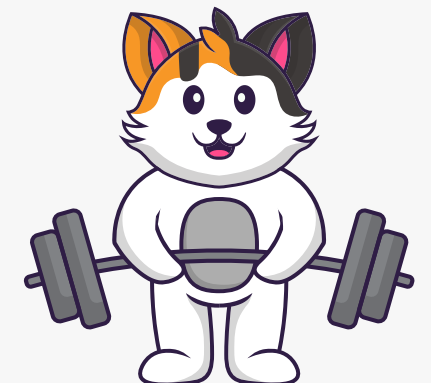
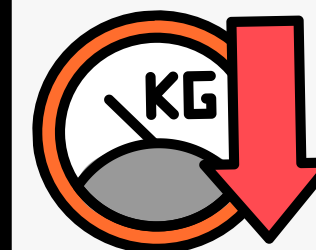
If you would like extra help, Dr. Graham at Graham Mobile Veterinary Weight Management Services focuses her practice solely on helping pets achieve their goal weight and increasing their lifespan and mobility - this is a huge part of helping our patients thrive.

<https://thehealthierpetwithin.ca/about/>



Lifestyle

Adjustments to lifestyle, exercise and routine must always be considered as part of the treatment plan for any painful, acute or chronic condition. More about this later...



Supplements

Omega-3 fatty acids have a number of potential benefits in dogs and cats. It is always recommended to start with a smaller dose of the oils (25-50% of recommended dose) and work your way up to the full dose. This is to help reduce the likelihood of stomach upset, diarrhea and flatulence.

Fish oil, which is high in omega-3 fatty acids, is the most appropriate supplement to be used for this purpose. Flaxseed/flaxseed oil is also high in omega-3 fatty acids but it is not recommended because it is poorly absorbed and ineffective for dogs and cats. Avoid cod liver oil as it can provide toxic levels of vitamins A and D when used at this dose.



Dosing:

Cats: 50mg/kg combined EPA/DHA per day.

Dogs: Joint Disease: 100-200mg/kg of combined EPA/DHA

Cautions/Important Notes:

- 1. If your pet is eating a diet that has a high fish, fish meal, or fish oil content, an adjustment to this fish oil dose may be needed to avoid giving too much omega-3 fatty acids. Overdose toxicity is possible (though difficult to achieve).
- 2. If your pet is overweight or gains weight on the supplement, an adjusted dose should be determined by your veterinarian.
- 3. The total daily dose can be administered at a single time daily or can be divided over the course of the day.
- 4. Not all supplements have appropriate concentrations of the individual fatty acids or have good quality control. Look for Neutraceutical or Drug Information Numbers on your products to confirm they have been properly tested.

Quality and Safety

The Licensed Natural Health Products Database contains information about natural health products that have been issued a product licence by Health Canada.

Products with a licence have been assessed by Health Canada and found to be safe, effective and of high quality under their recommended conditions of use.

Look for an NN, NPN or DIN-HM number on the label.

<https://www.canada.ca/en/health-canada/services/drugs-health-products/natural-non-prescription/applications-submissions/product-licensing/licensed-natural-health-products-database.html>

Cannabis and CBD

“Under the Cannabis Act and Regulations, veterinarians are permitted to prescribe and dispense Health Canada approved medications with cannabis or CBD (cannabidiol); however, there are currently no approved medications with cannabis or CBD to treat animals in Canada.”

<https://www.cvo.org/veterinary-practice/practice-advisory-service#:~:text=The%20scientific%20evidence%20to%20support,a%20client%20about%20their%20pet.>

With there not being any approved products in Canada, and minimal scientific research supporting or providing dosing for cannabis products, we do not support the use of cannabis products at this time. We do treat pets for overdose, so caution is advised.

Use at your own risk, and ensure any product you use is from a trusted source and does NOT contain THC.



Glucosamine HCl, MSM, Green Lipped Muscle

Most commercial joint supplements contain a combination of the above products. Some may have additional ingredients as well. We would always recommend a product which includes the above as well as Omega 3 Fatty Acids, such as Ubavet Joint Powermeg.

Joint supplements must be given daily to be effective and should be started early in a dog’s life to have the most effect on preserving joint health and slowing progression of disease.

4-Cyte Epiitalis

4-Cyte is a proprietary blend of oils, available in small granules. They have proven high efficacy in dogs and horses especially, with a response in 4 weeks. This product is guaranteed for both palatability and satisfaction. It is a very low risk product.



Prescription Medications

There are many many options out there for prescription medications used to manage pain associated with OA/DJD/Musculoskeletal Disorders.
This is a short summary of the categories we use most often.

NSAIDS - Non-Steroidal Anti-inflammatory Drugs

Meloxicam - Metacam - Rheumocam
Grapiprant - Galliprant

Give with a full meal to reduce risk of stomach upset
Must be given every 24 hours to achieve proper effects

Method of Action:

Reduces inflammation in the joint/body
Controls pain

Risks (not limited to):

May worsen existing kidney or liver dysfunction
Increased risk of gastric ulcers or bleeding

Requirements:

Annual examination, bloodwork every 6 months to monitor organ function



Anticonvulsant/Analgesic Drug

Gabapentin

Should be given 2-3 times daily
Works best in combination with an NSAID, not on its own

Method of Action:

Controls pain
Reduces anxiety

Risks (not limited to):

Minimal risks
Lethargy, drowsiness that can affect overall day to day
Ataxia when starting treatment, tends to improve

Requirements:

Annual examination

Recommended: bloodwork every 12 months to monitor organ function and cell counts

Lowest Effective Dose

Utilizing the label dose of NSAIDs is recommended for adequate pain control. In some cases, the dose may be adjusted lower for the purposes of reducing negative effects on the organs and cell counts.

Caution is recommended as it is quite common for doses to be reduced to a level of ineffectiveness.

Reference:

“Lowest Effective Dose - Eric Toncy, DV, MSc, PhD, DUn

Pain Medication Trials

When there is suspicion of chronic pain, it is recommended to complete a pain medication trial. This involves using a fast-acting medication for 2 weeks and determining if a pet’s quality of life is improved.

Steps:

1. Take a few videos of your pet doing different activities and at different times of day.
2. Complete a quality of life checklist, or mobility survey - depending on the body systems involved.
3. Give the medication as directed for 2 weeks and make note of any side effects or concerns - call us if there are any.
4. Repeat your videos and checklists to look for areas of improvement.

The changes may be small, faster to get up in the morning, easier movement up the stairs, more interactive with friends and family, improved appetite etc. Small changes make a big impact on overall quality of life.

Prescription Medications

Anti NGF mAb - anti-nerve growth factor (NGF) monoclonal antibody (mAb)

Bedinvetmab - Librela
Frunevetmab - Solensia

Injection is given once monthly

Method of Action:

Blocks pain receptors to prevent pets from feeling pain

Risks (not limited to):

Minimal risks
Very slight chance (0.01-0.1%) of temporary incontinence or ataxia
Use caution when giving concurrently with NSAIDs

Requirements:

Annual examination,
Bloodwork every 6 months to monitor organ function



Opioids

Buprenorphine

Injection is given 2-3 times daily (short-acting)

Injection is given every 3 days (long-acting)

Liquid can be given orally 2-3 times daily and is absorbed through the gums

Method of Action:

Risks (not limited to):

Anorexia, constipation
Suitable for acute pain only, less effective for chronic pain

Requirements:

Annual examination

Tramadol is also an opioid, however it is not used by our doctors as it is proven to be ineffective at controlling pain and is not recommended for use in animals.

Disease Modifying Osteoarthritis Drug (DMOAD)

Pentosan polysulfate sodium - Cartrophen

Injection is given once per week for 4 weeks and then as needed

Method of Action:

Slows destruction of cartilage and stimulates production of cartilage
Stimulates production of joint lubricant

Clears the blockages in blood vessels to deliver nutrition to the joint and bone

Risks (not limited to):

Increased risk of bleeding in the 7 days following administration (avoid surgery)
Some nausea and lethargy in the first 24-48 hours after an injection
Use caution when giving concurrently with NSAIDs

Requirements:

Annual examination,

Recommended: bloodwork every 12 months to monitor organ function and cell counts

Tylenol, Advil, Aspirin

Tylenol has been safely used in dogs, however there is a narrow margin of safety and a lack of efficacy for controlling chronic or persistent pain. A single dose of Tylenol can be fatal to a cat.

Advil and Aspirin are NSAIDs and must never be mixed with other NSAIDs or steroids. Overuse of Advil or Aspirin can negatively affect cell counts and organ function. If either is given, a washout period must be observed before starting veterinary-prescribed medications due to the risk of gastric ulcers and bleeding.

<https://www.petpoisonhelpline.com/blog/otc-pain-medications-and-dogs/>


Quality of Life

Quality of Life is a term that we use quite frequently. Our priority when looking after pets is always that they are happy, healthy and pain-free. When their day-to-day becomes difficult for them to navigate, we need to step in and make some decisions.

Quality of life is challenging to measure in comparison to quantity of life. All too often we (as humans) find ourselves comparing lives of pets in terms of years (my last cat was 20 years old, my parents lab lived to be 16 etc) and we don't always consider whether those years were good ones or not. The purpose of routinely assessing quality of life is to see what adjustments need to be made (if any). Taking into consideration the quality of life for the humans involved is also an important part of the equation. For example, if medications being used to manage a condition in a pet is causing excessive urination and owners are having to clean up pee in the house and neither pet nor owner are able to sleep through the night due to potty breaks, we need to reassess and adjust our plan.

Pain is not a condition that humans are happy to live with and this is the case for our pets as well. If medications, supplements, lifestyle changes etc cannot be made, euthanasia offers the final solution to relieve suffering.

We recommend using quality of life tools at home to help guide decisions.



Lap of Love Pet Quality-of-Life Scale

When evaluating the quality of life of your pet, personalized patient and family information is important when reaching an educated, informed, and supported choice that fits not only your pet's medical condition, but also your wishes and expectations. In short, quality of life applies not only to the pet, it also applies to you!

Your Name: _____

Pet's Name: _____ Date & Time: _____

SCORE EACH SUBSECTION ON A SCALE OF 0-2:

0 = agree with statement (describes my pet)
 1 = some changes seen
 2 = disagree with statement (does not describe my pet)

<div style="background-color: #d3d3d3; padding: 5px; margin-bottom: 10px;">SOCIAL FUNCTIONS</div> <p>_____ Desire to be with the family has not changed</p> <p>_____ Interacts normally with family or other pets (i.e., no increased aggression or other changes)</p>	<div style="background-color: #d3d3d3; padding: 5px; margin-bottom: 10px;">HEALTH</div> <p>_____ No changes in breathing or panting patterns</p> <p>_____ No outward signs of pain (excessive panting, pacing, and whining are most commonly seen)</p> <p>_____ No pacing around the house</p> <p>_____ My pet's overall condition has not changed recently</p>
<div style="background-color: #d3d3d3; padding: 5px; margin-bottom: 10px;">MENTAL HEALTH</div> <p>_____ Enjoys normal play activities</p> <p>_____ Still dislikes the same thing (i.e., still hates the mailman = 0, or doesn't bark at the mailman anymore = 2)</p> <p>_____ No outward signs of stress or anxiety</p> <p>_____ Does not seem confused or apathetic</p> <p>_____ Nighttime activity is normal, no changes seen</p>	<div style="background-color: #d3d3d3; padding: 5px; margin-bottom: 10px;">NATURAL FUNCTIONS</div> <p>_____ Appetite has stayed the same</p> <p>_____ Drinking has stayed the same</p> <p>_____ Normal urination habits</p> <p>_____ Normal bowel movement habits</p> <p>_____ Ability to ambulate (walk around) has stayed the same</p>


RESULTS

_____ Total score added from each section

0-8: Quality of life is most likely adequate. No medical intervention required yet, but guidance from your veterinarian may help you identify signs to look for in the future.

9-16: Quality of life is questionable and medical intervention is suggested. Your pet would certainly benefit from veterinary oversight and guidance to evaluate the disease process he/she is experiencing.

17-32: Quality of life is a definite concern. Changes will likely become more progressive and more severe in the near future. Veterinary guidance will help you better understand the end stages of your pet's disease process in order to make a more informed decision of whether to continue hospice care or elect peaceful euthanasia.



Lap of Love Therapy & Wellness Solutions

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Lap of Love Pet Family Concerns

SCORE EACH ITEM
ON A SCALE OF 0-2:

0 = I am not concerned at this time
1 = There is some concern
2 = I am concerned about this

I AM CONCERNED ABOUT THE FOLLOWING THINGS:

☐ Pet suffering

☐ Desire to perform nursing care for your pet

☐ Pet dying alone

☐ Ability to perform nursing care for your pet

☐ Not knowing the right time to euthanize

☐ Coping with loss

☐ Concern for other household animals

☐ Concern for other members of the family (i.e. children)

RESULTS

Total score added from each section

0-4: Your concerns are minimal at this time. You have either accepted the inevitable loss of your pet and understand what lies ahead, or have not yet given it much thought. If you have not considered these things, now is the time to begin evaluating your own concerns and limitations.

5-9: Your concerns are mounting. Begin your search for information by educating yourself on your pet's condition; it's the best way to ensure you are prepared for the emotional changes ahead.

10-16: Although you may not place much value on your own quality of life, your concerns about the changes in your pet are valid. Now is the time to prepare yourself and to build a support system around you. Veterinary guidance will help you prepare for the medical changes in your pet while counselors and other health professionals can begin helping you with anticipatory grief.

DISCUSS THE QUESTIONS BELOW, AND THE ENTIRE QUALITY-OF-LIFE SCALE, WITH YOUR VETERINARIAN

Below are some open-ended questions that assist gauge your family's time, emotional, and (when appropriate, financial) budgets:

1. Have you ever been through the loss of a pet before? If so, what was your experience (good or bad, and why)?

2. What do you hope the life expectancy of your pet will be? What do you think it will be?

3. What is the ideal situation you wish for your pet's end of life experience? (at home, pass away in her sleep, etc.)

Suggestions on using this quality-of-life scale:

1. Complete the scale at different times of the day, note circadian fluctuations in well-being. (We find most pets tend to do worse at night and better during the day.)

2. Request multiple members of the family complete the scale: compare observations.

3. Take periodic photos of your pet to help you remember their physical appearance.

Resources:

1. AAHA/AAFP Pain Management Guidelines for Dogs and Cats, www.aahanel.org/Library/PainMgmt.aspx

Lap of Love

Veterinary Hospice & End-of-Life Solutions

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<https://www.lapoflove.com/quality-of-life-assessment>

<https://www.lapoflove.com/resource-center/symptom-management/lameness-limping>

Palliative Care

When we move into Palliative Care, we use the medications necessary to block pain without worrying about the adverse effects of the medications on the rest of the body. The sole goal is to keep pets comfortable, with the knowledge that organ function and other body systems may be negatively affected. This is not a decision to make lightly, though we do support it.

Resources



Canadian Animal Rehab Services
www.animalrehab.on.ca



Catalyst Animal Chiropractic
www.catalystanimalchiro.com



Pawsitive Animal Wellness
www.pawsitiveanimalwellness.ca



Loyalist Veterinary Orthopaedic & Rehabilitation Services
www.lvoars.com/rehabilitation

At Presqu'ile Animal Hospital, we are committed to ongoing growth and well-informed medical decisions. We utilize tools and information found within the OA Treatment Guidelines that were created by a Canadian Advisory Board of 9 veterinarians. We also reference the guidelines and consensus statements produced and supported by the American Association of Feline Practitioners. The COAST and LOAD tools are internationally recognized tools that are proven effective at assessing Canine OsteoArthritis.

<https://www.cartrophen.com/for-dog-owners/what-is-arthritis/>

<https://www.zoetisus.com/conditions/petcare/oa-pain/>

<https://catfriendly.com/keep-your-cat-healthy/nsaids/>

<https://pubmed.ncbi.nlm.nih.gov/32978786/>

<https://todaysveterinarypractice.com/wp-content/uploads/sites/4/2016/09/T1309F04.pdf>

<https://www.merckvetmanual.com/dog-owners/bone,-joint,-and-muscle-disorders-of-dogs/introduction-to-bone,-joint,-and-muscle-disorders-of-dogs>

<https://newscenter.purina.com/LifeSpanStudy#:~:text=The%2014%2Dyear%20Purina%20%22Life,condition%2C%20resulting%20in%20longer%20life.>

Published Study - Evaluation of Construct and Criterion Validity for the 'Liverpool Osteoarthritis in Dogs' (LOAD) Clinical Metrology Instrument and Comparison to Two Other Instruments - <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0058125>

Liverpool Osteoarthritis in Dogs (LOAD) owner questionnaire - <https://siriusvet.com/storage/app/media/files/load-b-editablepdf-initlvisit-2017.pdf>