

# Managing Your Pet's Arthritis Pain

## Oral medications

What Is It?	How Does It Work?	How Strong is the Science?	Pros	Cons
<p><u>Oral NSAID</u></p> <p>(Non-steroidal anti-inflammatory drugs)</p>	<p>This class of drugs is the same as ibuprofen or naproxen for humans. They work by blocking steps in the inflammatory pathway that contribute to pain.</p> <p>Examples include: Rimadyl, Meloxicam, and Onsior</p>	Very Strong	<ul style="list-style-type: none"> <li>Reliable and fast pain relief</li> <li>Large effect for most patients</li> <li>Well tolerated by the majority of patients</li> </ul>	<ul style="list-style-type: none"> <li>Requires blood work monitoring twice a year due to:               <ul style="list-style-type: none"> <li>Risk for worsening kidney disease (especially in cats)</li> <li>Risk of liver disease (dogs)</li> </ul> </li> <li>Can cause GI upset</li> </ul>
<p><u>Gabapentin</u></p>	<p>Reduces the release of certain neurotransmitters involved in pain perception. Works best for neuropathic pain.</p>	Strong	<ul style="list-style-type: none"> <li>Safe to use with a variety of underlying health problems and other drugs</li> <li>Very inexpensive and no bloodwork monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Not usually effective alone</li> <li>Requires 2-3 times a day dosing</li> <li>May cause sedation, though usually pets will acclimate</li> </ul>
<p><u>Amantadine</u></p>	<p>This medication blocks the NMDA receptors which are another receptor especially involved in chronic pain perception.</p>	Medium	<ul style="list-style-type: none"> <li>Some pets may get long lasting relief from just 2 weeks of treatment at a time</li> </ul>	<ul style="list-style-type: none"> <li>Not effective alone</li> <li>Can cause GI upset</li> <li>Must be compounded for accurate dosing in smaller pets</li> </ul>
<p><u>Opioids</u></p>	<p>This class of drugs block the opioid pain receptors involved in pain perception.</p> <p>Examples: tramadol, buprenorphine</p>	Weak (for oral)	<ul style="list-style-type: none"> <li>Inexpensive</li> </ul>	<ul style="list-style-type: none"> <li>Controlled studies demonstrate very little effect from oral tramadol in dogs</li> <li>Tends to cause sedation</li> </ul>

# Managing Your Pet's Arthritis Pain cont.

## Injectable Medications

What Is It?	How Does It Work?	How Strong is the Science?	Pros	Cons
<p><u>Anti-NGF monoclonal antibody injection</u></p>	<p>This class of drugs blocks a receptor called NGF that is involved in pain perception, particularly chronic pain.</p> <p>Examples include: Librela (dogs) and Solensia (cats)</p>	<p>Strong (but new)</p>	<ul style="list-style-type: none"> <li>• Once a month injection</li> <li>• Safe for pets with kidney or liver disease</li> <li>• No bloodwork monitoring required</li> </ul>	<ul style="list-style-type: none"> <li>• Can take 2-6 weeks to see an improvement</li> <li>• Monthly trip to the vet's office</li> <li>• Cannot be given together with an NSAID long term</li> </ul>
<p><u>PSGAGs</u> (Polysulfated glycosaminoglycans)</p>	<p>These molecules disrupt enzymes in the joint that break down cartilage and also are used to build lubricating components of joint fluid.</p> <p>Example: Adequan</p>	<p>Medium</p>	<ul style="list-style-type: none"> <li>• Safe to use with a variety of underlying health problems and other drugs</li> <li>• No bloodwork monitoring required</li> <li>• Usually administered 1-2 times a month at home or at the vet once steady state reached</li> </ul>	<ul style="list-style-type: none"> <li>• Can take 1-2 months to see an improvement</li> <li>• Initial injection series is more frequent (2 x a week)</li> <li>• Can be expensive depending on size of pet</li> </ul>

# Managing Your Pet's Arthritis Pain cont.

## Supplements

What Is It?	How Does It Work?	How Strong is the Science?	Pros	Cons
<p><u>Omega-Fatty Acids (Fish Oil)</u></p>	<p>Omega-3 fatty acids (EPA and DHA) are building blocks for pathways that tend to promote an anti-inflammatory state in the joints but also elsewhere in the body.</p>	<p>Strong</p>	<ul style="list-style-type: none"> <li>• Generally well tolerated</li> <li>• Can be supplemented separately or in specially formulated diets</li> <li>• Can be safely combined with any other treatments</li> </ul>	<ul style="list-style-type: none"> <li>• Can cause diarrhea at high doses</li> <li>• Rare cases of food sensitivity reactions in pets with allergies to fish</li> <li>• Small effect compared to drugs and may work best for prevention</li> </ul>
<p><u>Glucosamine &amp; Chondroitin</u></p>	<p>Proposed to reduce inflammation in the joint and inhibit the break down of cartilage.</p>	<p>Weak</p>	<ul style="list-style-type: none"> <li>• Minimal risks to pet</li> <li>• Can be safely combined with any other treatments</li> </ul>	<ul style="list-style-type: none"> <li>• Depending on product may be expensive</li> <li>• Small effect compared to drugs and may work best for prevention</li> </ul>
<p><u>Other Joint Supplements</u></p> <p>(<u>Egg shell membrane, green lipped mussel extract, boswellia, ASU, MSM</u>)</p>	<p>There are a variety of proposed mechanisms of action. These are typically combination products.</p> <p>Examples: MovoFlex, Dasequin Advanced</p>	<p>Medium to Weak</p>	<ul style="list-style-type: none"> <li>• Minimal risks to pet</li> <li>• Can be safely combined with any other treatments</li> </ul>	<ul style="list-style-type: none"> <li>• Depending on product may be expensive</li> <li>• Small effect compared to drugs and may work best for prevention</li> </ul>

# Managing Your Pet's Arthritis Pain cont.

## Non-medication Therapies

What Is It?	How Does It Work?	How Strong is the Science?	Pros	Cons
<u>Weight Loss</u>	Reduces the stress on arthritic joints. Weight loss of as little as 1lb can improve mobility and pain scores.	Very Strong	<ul style="list-style-type: none"> <li>No health risks for the pet</li> </ul>	<ul style="list-style-type: none"> <li>Time and effort intensive</li> <li>Exercise may be a challenge if arthritis pain is already advanced</li> </ul>
<u>Physical Therapy</u>	Helps pets maintain muscle mass and maintain mobility and flexibility and reduces pain.	Strong	<ul style="list-style-type: none"> <li>Safe for nearly all pets unless there is a concurrent acute injury</li> </ul>	<ul style="list-style-type: none"> <li>Expensive</li> <li>Time intensive</li> <li>Need a specialty practitioner</li> </ul>
<u>Therapeutic Laser</u>	The use of red and near-infrared light to stimulate healing, relieve pain and reduce inflammation.	Medium	<ul style="list-style-type: none"> <li>Minimal risks to pet</li> </ul>	<ul style="list-style-type: none"> <li>Time intensive (weekly to bi-weekly veterinary visits)</li> </ul>
<u>Acupuncture</u>	Pressure applied at acupoint sites via long thin needles appears to stimulate release of endorphins and other similar brain chemicals that help with pain management.	Medium	<ul style="list-style-type: none"> <li>Minimal risks to pet</li> </ul>	<ul style="list-style-type: none"> <li>Time intensive</li> <li>Expensive</li> <li>Need a specialty practitioner</li> </ul>