



Each of these layers works at a different site in the body, and they can be used in conjunction with one another to treat chronic pain and arthritis through multiple channels simultaneously. We usually recommend beginning with the non-pharmaceutical options (supplements and diet change) and then adding pharmaceuticals as needed.

Note: Regular bloodwork is advised if your pet is using pharmaceutical medications long-term (including NSAIDs, steroids, opiates, sedatives, and muscle relaxants).

1 - Supplements

These work at the site of pain and inflammation.

Oral Supplements:

- Glucosamine, chondroitin, MSM, green lipped mussel powder, etc.
- Human products can be useful but have only shown ~20-25% efficacy
- Best results when using 2-3 supplements per day - discuss dosage with veterinarian
- Some newer veterinary products which are showing more promise with efficacy: Flexadin, Osteosupport, Dasuquin, Recovery, and Sasha's Blend

Omega Fatty Acids

- Eicosaderm, Aventix Omega 3 Complete (Vet products) and Renew Life Norwegian Gold (Thrifties et al.)
- Use fish oils - plant sources such as flaxseed are primarily used to improve skin
- Recommended dosing - 66mg/kg of EPA + DHA per day
- Beware of poor quality products – efficacy and safety are significantly affected by type of fish used, processing and storage

Injectable Supplements:

Cartrophen

- Administer subcutaneously – given weekly for 4 weeks, then monthly
- Replaces the building blocks required by the body to fix damaged cartilage and replace synovial fluid
- Has anti-inflammatory effects
- 80% of dogs show improvement within 4 weeks

Diets

- Important to decrease excess weight and maintain a healthy body condition
- Fat is pro-inflammatory as well as hard on joints when carrying an excessive amount
- Diets for arthritis also contain high levels of some of the supplements mentioned above
- It is usually more cost effective to take advantage of the supplements in the diet rather than adding them on top
- Often significant improvement in mobility is noticed after as little as a month
- Can reduce the amount of pharmaceuticals required to keep a pet comfortable

2 - Anti-inflammatories

These also work at the site of pain and inflammation.

NSAIDs (non-steroidal anti-inflammatories)

- e.g. Metacam, Onsior, Deramaxx, Galliprant
- fewer side effects than steroids so usually the first choice
- not as potent for back and neck pain as steroids
- good for long term use in pets who are painful most of the time and for acute flare ups
- processed through liver and kidneys
- side effects can include upset stomach, decreased appetite, vomiting, diarrhea, dark/tarry stool (ulcer), increased thirst

Steroids

- e.g. prednisone, prednisolone
- more side effects than NSAIDs especially at higher doses or with long term use
- more potent than NSAIDs for back and neck pain
- good for very short term use for acute flare ups only
- side effects can be similar to NSAIDs plus increased thirst/appetite/panting/urination
- long term use can: increase risk of infections, weaken muscles including heart, harm kidneys, cause diabetes in cats etc

NEVER USE NSAIDs AND STEROIDS SIMULTANEOUSLY

3 – Opioids

These work at several sites along the pain pathway.

- Tramadol or codeine are commonly used
- Side effects can be sedation and possibly constipation
- Usually just for acute flare ups but helpful for every day use in some cases
- Often combined with acetaminophen (e.g. Tylenol 3) for larger dogs ****NEVER FOR CATS****

4 – Gabapentin

This works on the nerves.

- Very safe – wide margin for safety
- Lower doses are used for cats with renal disease
- Side effect is sedation - often improves after several days
- Don't stop suddenly or else can get "rebound pain"; instead, taper off.
- May need to increase dose incrementally until reach comfort or unacceptable level of sedation.

5 – Amantadine

Works at the spinal cord and brain level

- partially blocking pain pathway receptors within the central nervous system
- Possible side effects: gastrointestinal (diarrhea, gas)
- Use with caution if liver or kidney dysfunction, congestive heart failure, and seizure disorders.

6 – Complimentary Treatment and Considerations

- Methocarbamol (Robaxin) - muscle relaxant
 - Possible side effect is sedation
- Acupuncture, chiropractic, therapeutic lasers, massage, physio, underwater treadmill
 - Often very helpful for acute and chronic pain
 - Available at Hillside Vet, Kindred Spirits Vet, Ace Therapy (Kristen Giglio)
- Regular exercise and movement
 - Helps maintain healthy weight, muscle mass, bond with owners and happiness factor
 - Keeps joints and muscles from seizing up
 - Releases natural endorphins to reduce pain and anxiety – brushing/grooming do too
 - Grippy surfaces help a lot – carpet runners, non-slip booties
- Well-padded bedding that is easy to get in and out of
- Harness – to aid your pet in getting up - <https://helpemup.com/>