

# We Are Excited to Introduce

Laser Therapy - Reduces Pain & Speeds Healing



We are excited to offer our clients Companion Laser Therapy. Laser therapy provides a non-invasive, pain-free, surgery-free, drug-free treatment which is used to treat a variety of conditions and can be performed in conjunction with existing treatment protocols. Relief and/or improvement is often noticed within hours depending on the condition and your pet's response. Whether your pet is rehabilitating from Trauma or injury, healing from wounds, or simply aging, your companion can benefit from this innovative approach to treating pain.

## Applications for laser therapy include:

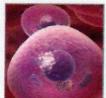


- Treatment of arthritis, degenerative joint disease, or hip displasia
- General pain management (sprains, strains, and stiffness)
- Post-surgery pain (spays, neuters, declaws, and other surgeries)
- Skin problems (hot spots, otitis, infections)
- Dental procedures
- Fractures and wounds (bites, abrasions, and lesions)

#### How does it work?

Laser therapy stimulates the body to heal from within. Non-thermal photons of light are administered to the body for about 3 to 8 minutes and absorbed by the injured cells. The cells are then stimulated and respond with a higher rate of metabolism. This results in relief from pain, increased circulation, reduced inflammation, and an acceleration of the healing process.







## What can my pet expect during a laser therapy treatment session?

Simply put, it provides relief. As the laser is administered, your pet will relax and enjoy the treatment. The almost immediate relief of pain will allow your pet to be comfortable and any anxiety that your pet initially experiences will dissipate.

Ask us about the benefits of laser therapy and how it can help your pet.





## **FAQ: Laser Therapy**

## Is laser therapy new?

The beneficial effects of laser light on tissue were first recognized almost forty years ago. Since then, there have been thousands of studies documenting the positive effects laser light has on different types of cells, tissue, and disorders. Recent advances in technology and manufacturing have made it possible to have this exciting modality available and affordable for clinicians.

### How long does the treatment take?

Treatment protocols are unique to each patient and condition. Therefore, treatments will vary in time, complexity and cost. For some chronic patients, multiple joints will be treated during one laser treatment session. When appropriate, laser therapy can be used as a complementary adjunct to other treatment plans.

### What can be treated with laser therapy?

If your pet is feeling pain, has inflammation, or a wound, the laser is a sterile, pain-free, surgery-free, drug-free treatment. The laser is used to treat a variety of injuries, wounds, fractures, neurological conditions, numerous dermatological problems, and pain. Whether your pet is rehabilitating from trauma or injury, healing from wounds, or simply aging, the laser has been shown to provide relief and speed healing.

## What's involved with treating my pet?

The laser light is delivered through a non-invasive handpiece to treat the affected area. Your pet will feel a gentle and soothing warmth. As the laser is administered, many pets will relax, much like you would experiencing a good massage. The almost immediate relief of pain will allow your pet to be comfortable and any anxiety that your pet initially experienced will dissipate.

#### How does it work?

The Companion therapy laser system sends photons, or packets of light energy, deep into tissue without damaging it. These photons are absorbed within the mitochondria of the cells and induce a chemical change called "photo-bio-modulation". This light energy then inspires production of ATP in the cell. ATP is the fuel, or energy, cells need for repair and rejuvenation. Impaired or injured cells do not make this fuel at an optimal rate. Increased ATP production leads to healthier cells, healthier tissue, and healthier animals.

#### Are there any side effects?

There are no known side effects with this treatment.

#### What can I expect at home?

You might see a change in activity when your pet comes home. For some it might be increased activity and others may be more relaxed. This is due to the pain relief and reduction in inflammation.

## How should I support this treatment at home?

There are no specific things you need to do at home, other than follow normal restrictions, dietary needs, and additional treatment protocols as you pet's condition dictates and is outlined by your veterinarian.

## What to expect during a Companion Laser Therapy treatment session for your companion?

Simply put, it provides relief. The fur does not need to be clipped. Eye protection will be worn by the laser operator and anyone in a close proximity to the laser probe. The eyes of the animal will be directed away from the treatment area or covered with a towel or eye wear. The clinician will move the probe over the area of treatment to assure the laser is being delivered to the area which needs improvement.

## What will my pet feel?

As the laser is administered, often pets will relax and enjoy, much like you would experiencing a good massage. The almost immediate relief of pain will allow your pet to be comfortable and any anxiety that your pet initially experienced will dissipate. Occasionally, angry cats will start to purr and dogs will fall asleep during their therapy session.

## Is there anything my pet should or shouldn't do, or take, while on the treatment?

Just follow normal treatment protocols as outlined. You do not need to be overly cautious nor should you overdo any activities. Just business as usual.

## When can I expect to see an improvement? What might I see?

You may see relief in the first treatment or so as pain and inflammation are reduced. For example: better mobility for joint conditions, drying and healing of dermatological issues, faster healing for wounds and incisions, or your pet just seeming more relaxed and comfortable. For some conditions, a series of treatments may be necessary before you see results due to the severity or complexity of the condition. Each pet is different, and treatments are unique for your pet's specific needs.



# **BIOLOGICAL EFFECTS OF LASER THERAPY**

#### 1. Anti-Inflammation

Laser Therapy reduces inflammation with vasodilation, activation of the lymphatic drainage system, and reduction of pro-inflammatory mediators. As a result, inflammation, erythema, bruising, and edema are reduced.

#### 2. Analgesic Effect

Laser Therapy of diseased and damaged tissue produces a suppression of nociceptors, an increase of stimulation threshold, and an increased release of tissue endorphins. The result is a decreased patient perception of pain.

### 3. Accelerated Tissue Repair and Cell Growth

Photons of light from lasers penetrate deeply into tissue and accelerate cellular reproduction and growth. Laser light increases the energy available to the cells so that they can take on nutrients and get rid of waste products more quickly.

#### 4. Improved Vascular Activity

Laser light significantly increases the formation of new capillaries in damaged tissue. This speeds the healing process, resulting in more rapid wound closure.

### 5. Increased Metabolic Activity

The energy from photons of laser light is captured by chemical complexes within cells resulting in activation of enzyme systems and increased energy delivered into cellular metabolic processes.

#### 6. Trigger Points and Acupuncture Points

Laser therapy stimulates muscle trigger and acupuncture points without mechanical invasion to provide musculoskeletal pain relief.

#### 7. Reduced Fibrous Tissue Formation

Laser Therapy reduces the formation of scar tissue.

#### 8. Improved Nerve Function

Slow recovery of nerve functions in damaged tissue results in numbness and impaired limbs. Laser therapy accelerates nerve cell regeneration.

#### 9. Immunoregulation

Therapy laser photons have an effect on immune systems status through stimulation of immunoglobins and lymphocytes. Laser therapy energy is absorbed by chromophores (molecular enzymes) that react to laser light. The enzyme flavomono-nucleotide is activated and starts the production of ATP, which is the major carrier of cellular energy and the energy source for all chemical reactions in the cells.

#### 10. Faster Wound Healing

Laser light stimulates fibroblast development. Fibroblasts produce collagen, which is predominant in wound healing in damaged tissue. Collagen is the essential protein required to replace old tissue or to repair tissue injuries. As a result, laser therapy is effective on open wounds and burns.





Determination of acceptance is based on calling Customer Service and asking, it does not guarantee coverage

# Noses to Toes, Ears to Rears...



Quite simply, patients who suffer from any combination of pain, inflammation, or slow-healing wounds benefit from laser therapy, including -

Abscesses

ACL - Non-surgical/Partial or Post-Op

**Acral Lick Dermatitis** 

Acupuncture
Acute Nephritis
Anal Sacculitis

**Arthritis** 

Aural Hematomas

Avian Specific Disorders

Back Pain Bicipital Bursitis Bicipital Tendonitis

Bruising Burns

Cat Bite Abscesses

Cauda Equina Syndrome
Cervical IVDD (Acute/Chronic)
Chronic Neurological Conditions

Crop Inflammation
Cruciate Ligament Injury

Cystitis/FUS

Cystotomy - Post Surgery

Degenerative Joint Disease (DJD)

Demodicosis

Diseases of the Feet

Ear Disorders Edema

Elbow Dysplasia Elbow Hygroma Feline Acne Feline Asthma

Feline Lower Urinary Tract Disease (FLUTD)

Fractures

Geriatric Disorders

Gout

Head and Neck

Hematomas (Post-Surgical)

Hip Dysplasia

Infections, Bacterial and Fungal Infectious Tracheobronchitis Intervertebral Disc Disease Intestinal Impaction

IVDD (Acute/Chronic)

Mastitis

**MRSA Infections** 

Muscle and Ligament Disorders

Musculoskeletal Disorders

Neck Pain

Neurological Disorders Neuromuscular Disease Oral Cavity Disorders

Oral Surgery

Orthopedic Disorders
Otitis (Acute and Chronic)

Palliative Pain Relief

Pancreatitis Paralysis

Paralysis Due to Trauma

**Parvovirus** 

Periodontal Disease
Peripheral Nerve Injuries

Post Extractions

Post Surgical Pain Relief Post-operative healing

Post-Orthopedic Surgical Procedures

Pyoderma

Pyotraumatic Dermatitis (hot spots)

Rehabilation

**Respiratory Disorders** 

Rhinitis/Sinusitis Rodent Ulcers Skin Grafts Snake Bites

Soft Tissue Trauma Sprains and Strains

Stomatitis
Tail Fractures

Tendon Injury/Ligament Injury

Thoracic Limb

Trauma

**Urinary System Disorders** 

## TREATMENT MANAGEMENT OF COMMON CONDITIONS

## **Post Procedure Conditions**

Most post procedure patients require a single treatment immediately after the procedure. Examples are patients undergoing elective surgeries, minor dental procedures, and closure of minor wounds. Post procedure patients in which there has been more extensive tissue disruption should receive additional treatments (2-6) every other day. Examples are orthopedic, laparotomy, or thoracotomy patients.

## **Acute Conditions**

Acute conditions are treated a single, or multiple times, until resolution of the condition. Examples of single treatment acute conditions are pyotraumatic dermatitis, mild presentation of acute otitis, and abscesses without surrounding cellulitis. Examples of conditions requiring additional (2-4) every other day treatments are more involved presentations of acute otitis and abscesses with surrounding cellulitis.

## **Chronic Conditions**

Chronic conditions require multiple treatments to achieve clinical improvement, followed by maintenance treatments to maintain the effect. Examples are osteoarthritis, lick granulomas, and chronic lower urinary tract diseases.

Successful treatment design for chronic conditions follows accurate diagnosis and assessment of chronicity. Practitioners must avoid having a "one-size-fits-all" treatment design for chronic condition patients.

Patients with chronic conditions are treated in three phases:

Induction Phase - multiple (6-12) every other day treatments until clinical improvement is noted. The degree of tissue abnormality and chronicity dictate the number of induction treatments.

**Transition Phase** - gradual reduction in frequency of treatments to establish the frequency required for maintenance of desired effects.

Maintenance Phase - treatment at a frequency that maintains clinical results. Most chronic conditions can be maintained with a treatment every 3-4 weeks. Frequency must be adjusted to the patient's requirements.

Abdominal Disorder.....1 x a day for duration of clinical symptoms

Treat entire abdomen from both sides and ventral aspect

Abcesses /Tissue Infections ....Single time at initial visit

Larger Abcess with surrounding Cellulitis....3-4 x every other day

Treat area with non-contact wand and include a margin of healthy tissue around area treated

Anal Saculitis Mild Acute....Single time at initial visit

Anal Saculitis Chronic... Induction/every other day until symptoms resolved; Trans/reduce TXs Maint/ at frequency to maintain effect

Aural Hematoma....Drain and Treat with laser, then light pressure bandage, then TX every 3 days until fluid no longer forming and resolution of hematoma

Fractures.....Immediately after stabilization then every other day x 6 TXs

Treat from 360 degrees or all directions possible

Gingivitis/ Periodontal Disease...1 x along with appropriate dental care, then Induction/every other day until symptoms resolved Trans/reduce TXs Maint/at frequency to maintain desired effect

Treat open mouth if possible or Closed w/contact ball thru cheeks and intra mandibular space

**Lick Granulomas....Induction**/every other day until lesion resolved **Trans**/reduced TXs **Maint**/ at frequency to maintain effect.

Treat lesion from all possible directions.

Treat joint above lesion at Arthritis Setting for possible neuritis reduction.

Musculoskeletal Injury Acute......1 x after initial diagnosis......more involved/every other day until injury healed
Treat Acute Pain /Trauma setting......treat associated painful areas secondary to trauma area.

OsteoArthritis.....Treat affected joints as well as supportive painful areas

Initial TX before medications have been started. Induction/ every other day until mobility up and pain reduced. Trans/reduce TXs Maint/to maintain effect (usual 1 time every 3-6 weeks) once maintenance is achieved then add meds if needed as adjunct in lowest doses required. Long Term Chronic OA already on Meds......start TXs without med change. Induction/every other for 6-12 TXs, Trans/ reduce TXs (med frequency reduced) Maint/every 2-6 weeks as needed to maintain effects.

Otitis Mild ...........1 x at intial visit to reduce pain, open ear canal Otitis Acute..... 3-4 x every other day Otitis Chronic.......Induction/every other day until controlled Trans/ reduce TXs Maint /to maintain desired effect Perianal Fistulas...Induction/every other day Trans/ reduced TXs Maint / to maintain desired effect Pyrotraumatic Dermatitis...after cleaning and clipping area Treat a single time

If additional deeper pyoderma or cellulitis add 3-4 TXs every other day

Rhinitis-Sinusitis......Induction/every other day Trans/reduce TXs Maint/ to desired effect or resolution Treat over nasal cavity, maxillary and frontal sinuses with contact handpiece.

Snakebites.....Vapid.....copperhead, cotton mouth,rattlesnake) Treat 1 x a day or 2 x a day with uncontrolled pain Snakebites.....Elapid......coral snake) Wait 24 hours, then treat 1 x a day until resolved

Treat over bite marks and any tissue affected by toxin

Thoracic Disorder Acute.....every other day until symptoms gone

Chronic.....Induction/every other day Trans/ reduction of TXs Maint/to maintain desired effects Treat thru intercostal spaces

Stomatitis.....Induction/every other day Trans/Reduce TXs Maint/ to maintain desired effects Mouth Open if possible.

Mouth Closed.....treat with contact piece thru cheeks and intra mandibular spaces

Urinary Tract Disorders Acute.....every day until symptoms resolved

**Urinary Tract Disorders Chronic...Induction**/every other day until resolved x 6 TXs, then **Maint**/ to maintain effect May treat 2 x a day if acute pain.

Wounds.....every other day or every 3 days to coincide with bandage changes until resolved

Use even grid coverage with non-contact piece including a margin of healthy tissue included as total treated area of wound