## **Prescribing Information**

### Indications and usage

Anodyne<sup>®</sup> Therapy is indicated to temporarily

- Increase local circulation
- Reduce pain, stiffness and muscle spasm

### Warnings and Precautions



Local Anodyne<sup>®</sup> Therapy Provider

Anodyne<sup>®</sup> Therapy should not be used directly over an active malignancy or over the womb during pregnancy. There are no known drug interactions or side effects. As with other thermal modalities, there is a negligible risk of a superficial burn - approximately 3 adverse events are reported per estimated 1,000,000 professional treatments.<sup>17</sup> If patients increase activity levels, blood sugar levels should be closely monitored. The use of Anodyne® Therapy alone does not cause hypoglycemia.

### **Treatment Information**

Patients can be referred for treatment at a network of over 6,000 US based providers of Anodyne® Therapy including hospitals, home care agencies, physical therapy clinics and long term care facilities. If there is not a local provider listed on this brochure, contact 1-800-521-6664 to receive a local listing and additional referral materials. Treatments are typically included within a comprehensive plan of care administered three times per week, for an average of four to five weeks.

## **Continuity of Care After Discharge**

For those with a chronic condition, symptomatic relief obtained from Anodyne<sup>®</sup> Therapy treatments generally decreases over time after the treatment is withdrawn. For these patients, ongoing relief can be obtained from either periodic additional treatment in a clinical setting or through self treatment with an Anodyne<sup>®</sup> home system. Ongoing treatment is typically not necessary for patients with an acute condition, however individual results may vary.

Home 120 System

### 🔁 Anodyne® Therapy The Trusted Name in Light Therapy

Anodyne Therapy, LLC 14105 McCormick Drive Tampa, FL 33626 USA

**PHONE:** 800.521.6664 / +1 813.342.4432 FAX: 800.835.4581 / +1 813.342.4417 EMAIL: contact@anodynetherapy.com

### www.anodynetherapy.com

#### References

- 1. Leonard DR, Farooqi MH, and Myers S. Restoration of sensation, reduced pain, and improved balance in subjects with diabetic peripheral neuropathy: a double-blind, randomized, placebo-controlled study with monochromatic ent. Diabetes Care 2004; 27:168-172.
- 2. Harkless L, DeLellis S, Carnagie D, and Burke T. "Improved Foot Sensitivity and Pain Reduction in Patients with Peripheral Neuropathy After Treatment with MIRE." Journal of Diabetes and Its Complications 2009; 20(2) 81-87.
- 3. Burke T. "Infrared Photo Energy May Reduce Neuropathic pain." Practical Pain Management 2007; 7(6): 57-63.
- 4. Volkert W, Hassan A et al. Effectiveness of MIRE and Physical Therapy for Peripheral Neuropathy: Changes in Sensation, Pain and Balance A Preliminary, Multi-Center Study. Phys and Occup Therapy in Geriatrics 2006; 24(2). 5. Powell, M, Carnegie D, Burke T. Reversal of Diabetic Peripheral Neuropathy With Phototherapy (MIRE) Decreases Falls and the Fear of Falling and Improves Activities of Daily Living in Seniors. Age and Ageing 2006; 35: 11-16.
- 6. Thomasson T. Effects of Skin-Contact Monochromatic Infrared Irradiation on Tendonitis, Capsulitis, and Mvofascial Pain, J Neurol Orthop Med Surg 2006: 16: 242-245.
- 7. Lohr et al. "Enhancement of nitric oxide release from nitrosyl hemoglobin and nitrosyl myoglobin by red/near infrared radiation." Journal of Molecular Cellular Biology 2009; 26(5): 433-42.
- 8. Vladimirov Y, Borisenkoa G, Boriskinaa N, Kazarinovb K, Osipova A: NO-hemoglobin may be a light-sensitive source of nitric oxide both in solution and in red blood cells. J Photochem Photobiol B 2000; 59(1-3):115-122
- . Yoon, Y.; Song, U.; Hong, S.H.; Kim, J.Q. "Plasma nitric oxide concentration and nitric oxide synthase gene polymorphism in coronary artery disease". Clinc. Chem. 200; 46 (10): 1626–1630.
- 10. Cohen. "The Role of Nitric Oxide and Other Endothelial-Derived Vasoactive Substances in Vascular Disease." Progress In Cardiovascular Disease 1995; 38(2): 105-28.
- 11. Ferreira, Duarte, Lorenzetti. "The Molecular Mechanism of Action of Peripheral Morphine Analgesia: Stimulation of the cGMP System Via Nitric Oxide Release." European Journal of Pharmacology 1991; 201:121-22.
- 12. Moilanen, and Vapaatalo, "Nitric Oxide in Inflammation and Immune Response," Ann Med 1995; 27(3) 359-67.
- 13. Ziche, M., and L. Morbidelli. "Nitric Oxide and Angiogenesis." Journal of Neuro-Oncology 2004; 50(1-2): 139-48.
- 14. White, Thornton, Efron, and Barbul, "Enhancement of Fibroblast Synthesis By Nitric Oxide," Nitric Oxide 2000; 4(6) 572-82. 15. Traud, and Van Bibber, "The Role of Nitric Oxide in Insulin Dependent Diabetes Mellitus - Related Vascular Complications," The Western Journal of Medicine 162.5 (1995): 439-45
- 16. Calles-Excandon J, Cipolla M, Diabetes and Endothelial Dysfunction: A Clinical Perspective, Endocrine Reviews 2001; 22 (1) 36-52.

#### 17. Company risk management data on file.

#### The US FDA has not reviewed, evaluated or approved the described uses discussed in these clinical references





# **Anodyne<sup>®</sup> Infrared Therapy** A New Treatment Approach for Patients with Pain

Drug-free

Non-invasive

**Effective** 

# Introducing Anodyne<sup>®</sup> Infrared Therapy

The Anodyne<sup>®</sup> Therapy System is a FDA cleared, non-invasive medical device. This system emits monochromatic infrared light (MIRE<sup>™</sup>), providing an effective treatment for pain, poor circulation and muscle spasm caused by a range of factors including acute injuries, chemotherapy, diabetes and vascular disease.

Anodyne<sup>®</sup> Therapy provides significant symptomatic relief<sup>1-6</sup> throughout treatment while, due to its topical application, avoiding systemic side effects.

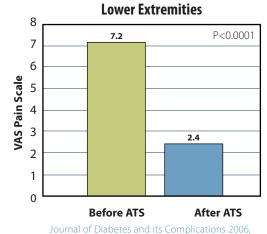
Healthcare professionals working in over 6,000 organizations use Anodyne<sup>®</sup> Therapy as an effective, non-invasive, treatment approach for their patients. These organizations include the US military, professional sports teams, homecare agencies and outpatient centers

# Clinically Proven Results 21 Peer Reviewed, Published Studies

Treatment with Anodyne<sup>®</sup> Therapy has the potential for both therapeutic and prophylactic utility, with positive results becoming evident after several treatments of 30-40 minutes duration.<sup>1</sup>

18 studies (involving over 5,000 patients) have been published in peer reviewed journals noting significant objective improvements across various endpoints such as:

- 67% mean reduction in lower extremity pain<sup>2</sup>
- Pain medication elimination or reduction for 51% of subjects<sup>3</sup>
- 49% reduction in pain levels for subjects with horrible to excruciating pain (vas 8.5-10)<sup>4</sup>
- 91% of subjects sustained pain relief over 12 months of continuous use<sup>5</sup>
- 90% of subjects with muscle spasm experienced 'total relief' within 12 treatments<sup>6</sup>



67% Pain Reduction in

Patients typically feel

a soothing warmth during treatment

rnal of Diabetes and its Complications 200 March/April Vol 20, No.2 (n=2239)

# The Method of Action is Specific... Infrared Light Stimulates a Local Release of Nitric Oxide

Mainstream knowledge of infrared LED technology developed in response to experiments conducted by NASA for the healing of injuries in space.

The Anodyne<sup>®</sup> Therapy System emits light at 890 nm through super luminous LED's. This wavelength combined with a patented, direct contact design maximizes the absorption of the infrared light into the body.

This modality provides a way for clinicians to treat patients with poor circulation as the use of infrared light has been shown to temporarily increase blood flow, and trigger the local release of nitric oxide(NO).<sup>7-8</sup>

# Nitric Oxide has been linked with:

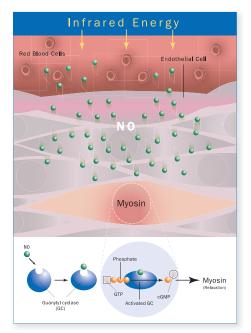
- Vasodilation<sup>9-10</sup>
- Reduction of pain<sup>11</sup>
- Reduction in inflammation<sup>12</sup>
- Angiogenesis<sup>13</sup>
- Collagen synthesis<sup>14</sup>

NO is an important regulator and mediator of numerous processes in the nervous, immune and cardiovascular systems<sup>9-14</sup>, however, it is perhaps most well known for its role in vasodilation. When released, NO stimulates the endothelial lining of both arterial and venous blood vessels causing vasodilation.<sup>9-10</sup>

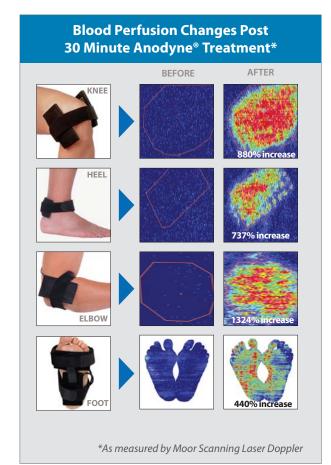
Simulating circulation and vasodilation without systemic side effects may be particularly significant for patients with diabetes and other vascular diseases. Research shows that these patients exhibit endothelial dysfunction, impaired nitric oxide metabolism and vascular responsiveness which possibly contribute to their experience of pain.<sup>15-16</sup>



Studies consistently show that patients have a high treatment response with a minimal side effect profile, and that efficacy is sustained throughout treatment.



NO induces the synthesis of cyclic GMP by stimulation of guanylate cyclase leading to relaxation of myosin



www.anodynetherapy.com/clinical