

## **Below are 4 Case Studies of Patients Who Have Failed Traditional Insurance Based Therapies.**

### **Peripheral Neuropathy**

An 80-year-old male with advanced circulatory disease in his lower extremities presents with numbness in his feet and toes. He cannot drive because he cannot feel his feet. He takes gabapentin for his symptoms.

Clinical examination shows advanced circulatory compromise in his lower extremities. He has evidence of peripheral artery disease and venous stasis. Edema and ecchymosis is noted bilaterally. Peripheral pulses are diminished bilaterally.

Patient began Stealth Laser therapy 3x/week for 1 month. By the end of 12 visits, his proprioception to the bottom of his feet returned. He could now feel the pedals in his car and was able to return to driving activity. In order to keep his progress stable, he returns every 6 weeks for a maintenance dose. His condition is now stable. He is able to drive without restriction.

[#peripheralneuropathy](#) [#stealthlasertherapy](#)

### **Bone on Bone Knee Arthritis**

88-year old female patient present with “bone on bone” knee arthritis in her left knee. Because of health reasons, she is not a candidate at this time for a total knee replacement surgery.

Clinical presentation shows no advanced genu varum deformity. She shows no ligamentous instability. She is tender in the left medial joint line, medial tibial plateau and femoral condyle. X-rays show advanced narrowing of the left medial compartment of the knee.

Patient began a treatment regime consisting of Stealth Micro-pulsed laser therapy (3x/week for 1 month). She achieved 80% reduction of pain. Patient wished to pursue continued improvement. She continued treatment once each week. Today she is 95% pain free. and can function normally. Mild difficulty with stair climbing is noted.

[#stealthmicropulsedlasertherapy](#) [#boneonbonearthritis](#)

### **Lumbar Spinal Stenosis**

An 86-year old male presents with a longstanding history of activity intolerance regarding walking distance (neurogenic claudication). He has a longstanding history of low back pain without surgical intervention. He has received epidural steroid injections (ESI) without relief. He indicates that he can walk 25-100 feet before pain begins in his right buttocks and right leg. Sitting relieves his symptoms completely. He wishes to avoid lumbar spine surgery.

His clinical presentation shows normal power in his lower extremities (5/5). He can heel and toe walk without difficulty. There are no root tension signs. He is tender in the right sciatic notch. He has midline lumbar spine tenderness from L2-S1.

Patient underwent an intensive course of Stealth Laser Therapy treatments for 1 month. He had a dramatic reduction in pain in his low back, right buttocks and right lower extremity. Today he can walk 1.6 miles each day without leg pain or limitation. He requires a maintenance dose of Laser once every 2 weeks to maintain a pain free quality of life.

#spinalstenosis#laserpainmanagement#privatepay

### **Fracture-Severe Ankle Sprain (Submitted by KOL Jesse Hatgis, DO)**

70-year-old female severely sprained left ankle as well as sustained small, non-displaced fracture demonstrated on MRI after stepping off a curb and poorly landing on the foot, with a subsequent fall onto the knee.

MRI report:

1. Nondisplaced fracture at the anterior calcaneal process. Bone bruises at the talar head and the 4th metatarsal base.
2. Partial tear of the anterior talofibular, calcaneofibular and deltoid ligaments.
3. Mild posterior tibialis tendinosis and tenosynovitis. Attenuation of the spring ligament.

The patient had 8/10 pain on the numeric rating scale (NRS).

After being properly evaluated a week later, she was placed on a CAM walker boot for 6 weeks with limited weight bearing.

She underwent a course of physical therapy 3 times a week for 4 weeks.

She also had Diowave laser therapy, 15 sessions lasting 10 minutes each, throughout a two-month period.

After the treatment, the patient reports that there is no more tenderness to palpation. She currently has 0/10 pain.

Pain is reduced by 95% after two months, and nearly zero pain after 4 months.

Only after ambulating for very long distances does she have a mild pain.

The range of motion is normalized now.

She is content with the outcome of her treatment.

### **Chronic low back pain, neck pain, thoracic pain, and peripheral neuropathy**

(Submitted by KOL Jesse Hatgis, DO)

66-year old female

Past medical history includes HLA-B27 positive psoriatic arthritis.

Medications include oxycodone, tramadol, and gabapentin  
The patient had 7/10 pain on the numeric rating scale (NRS).  
The low back pain is axial, non-radiating.  
Recent lumbar spine MRI demonstrates multilevel degenerative changes with endplate edema  
She began treatment of her low back pain with Diowave laser therapy.  
She underwent 5 sessions, lasting 15 minutes each, within a 2.5 week period.  
Several weeks later, she has 50% improvement and is thrilled with her pain reduction and improved functionality.  
She will now be in a much more comfortable position to undergo diagnostic medial branch nerve blocks with potential subsequent radiofrequency ablations to hopefully eliminate the remainder of her low back pain.  
She also has the option to continue partaking in Diowave therapy before, during, and/or after interventional pain management procedures.

Please let me know if you would like any other information.

Sincerely,

Jesse

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**A Financial Analysis by:**

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[www.interventionalspinefl.com](http://www.interventionalspinefl.com)

**“Implementing Self-Pay Diowave Stealth Micro-pulsed Laser Therapy  
Into an Insurance Based Interventional Pain Management Practice”**

**WHY IS DIOWAVE THE BEST LASER EXPERIENCE?**

**Artificial Intelligence:** Creates custom treatment protocol based on last treatment response

**Portability:** Easy to transport with easy storage and carrying ability

**Ease of use:** Only a few steps and screen taps to get started

**Handheld and directed:** The provider can move the beam back to center if the patient moves, and can move it in all directions to broaden the treatment area

High power with high penetration of deeper tissues

Can apply over electrical devices and metal, as no heat generated in the default stealth mode

Used for wound healing

Can use anywhere (except eyes, area of known malignancy, or gravid uterus)

Can treat multiple areas in succession

No drugs, no anesthesia, no needles, no unintended side effects

Patient is comfortable

Can have nearly immediate pain relief

Also approved for animals, with its own animal settings, so pets can have painless treatments even without having to go to the vet

#### **SUMMATION OF VARIOUS MAIN TREATMENT INDICATIONS FOR DIOWAVE:**

Back pain

Neck pain

Upper extremity pain

Lower extremity pain

Abdominal pain

Pelvic pain

Wound care

Treating with Diowave could have significant cost savings, as it could prevent much more expensive and/or non-covered procedures (e.g. for low back pain: spinal injections, radiofrequency ablations, discectomies, fusions, spinal cord stimulators, etc.

Diowave could produce significant improvement at a fraction of the cost, time, and without discomfort

**DIFFICULT TO TREAT PATHOLOGIES ARE ADEQUATELY TREATED BY DIOWAVE:**

Post-surgical pain

Implantable device pocket pain

Surgically fused areas in which insurance will not cover further treatment.

Areas that do not respond well to nerve blocks or joint injections.

Disc pathology

Wounds refractory to conventional medical treatment

After regenerative medicine treatment: Using laser to amplify effects of regenerative medicine treatments by kickstarting the process

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