



We don't just build Technology  
**We build Confidence**

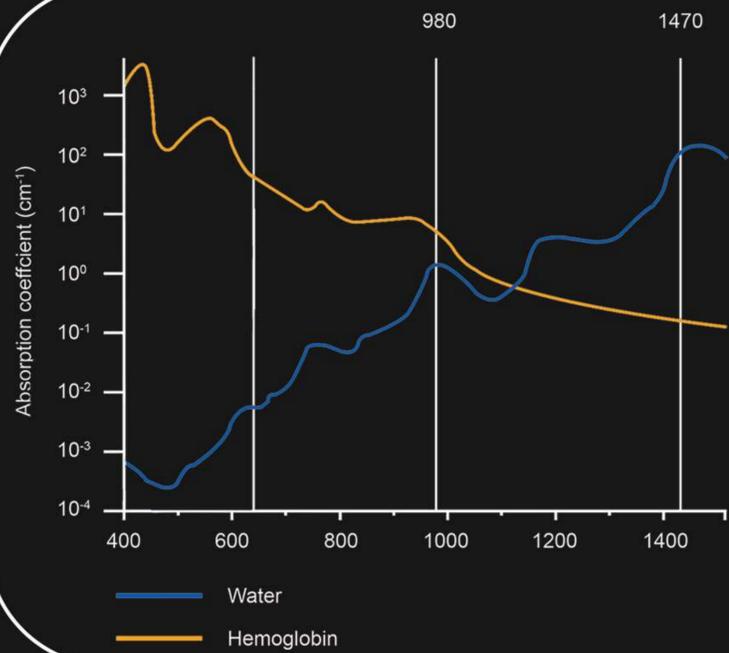
**Dual Wavelength**

**15 watts/1470nm+635nm**



Proctology, Varicose vein, Cosmetic Gynecology,  
Liposuction, PLDD, Wound Management

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



We Offer Diode Lasers with 15w/1470nm+635nm wavelength for Proctology, Varicose vein, Cosmetic Gynecology, Liposuction, PLDD, Wound Management



Emergency Switch



Touch Screen Interface

## Accessories



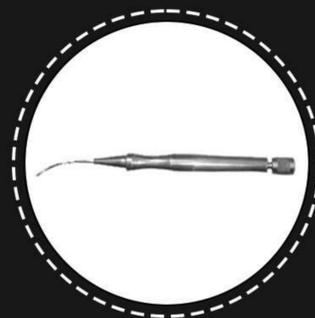
Safety Goggle



Foot Switch



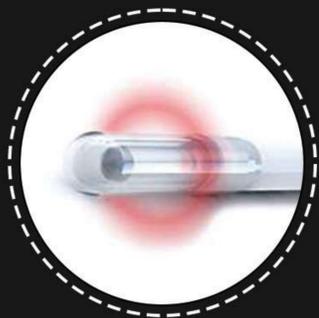
Carrying Case



Proctology Handpiece



Bare Fiber



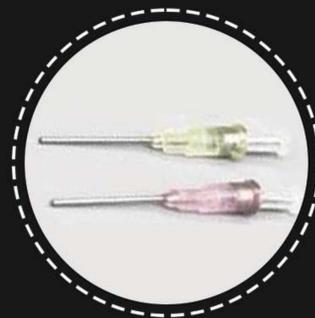
Radial Fiber



Conical Fiber (Optional)



Permanent Fiber (Optional)



Disposable Tips (Optional)



Proctology Handpiece (Optional)



SUI ( Stress Urinary Incontinence ) Handpiece (Optional)



LVR Handpiece (Optional)

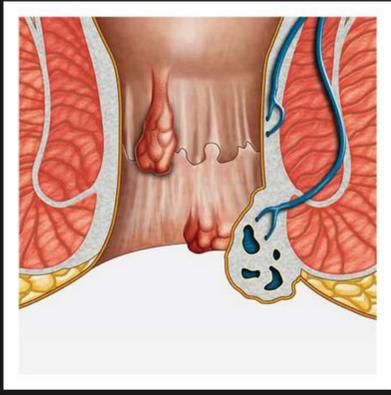
## Benefits of using Diode Laser



- ▶ Minimally Invasive
- ▶ Day - Care Procedures
- ▶ Less Bleeding, Less Trauma
- ▶ Faster Healing
- ▶ Scarless Treatment
- ▶ Reduced Pain and Discomfort
- ▶ Minimal Scarring
- ▶ Precision Treatment
- ▶ Short Recovery Time
- ▶ Long-lasting Results

Revolutionize your healthcare experience

# Laser treatment for Proctology

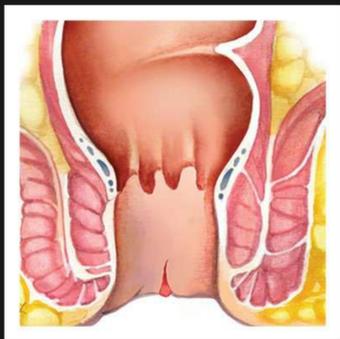


## Hemorrhoids

Under LA/GA, laser energy is delivered by radial fiber directly to hemorrhoidal nodes and they will obliterate from inside and this will help to preserve mucosa and sphincter structure to an extremely high precision. Laser energy is used to close off the blood supply nourishing the abnormal growth. The laser energy induces destruction of the venous epithelium and simultaneous obliteration of the hemorrhoidal pile by a shrinkage effect. Advantage of using laser compared to conventional surgery, fibrotic reconstruction generates new connective tissue, which ensures that the mucosa adheres to the underlying tissue. This also prevents the occurrence or recurrence of a prolapsed. Surgical procedure can be executed in only a few minutes.

## Fistula

Laser energy is delivered by optical fiber into the anal fistula tract and is used to thermally ablate and close of the abnormal pathway. The laser energy induces destruction of the fistula epithelium and simultaneous obliteration of the remaining fistula tract by shrinkage effect. The epithelialized tissue is being destroyed in a controlled way and the fistula tract collapses to a very high degree. This also supports and accelerates the healing process. Advantage of using diode laser using radial fiber compared to conventional surgery is, it gives good control to operator, also allows use in convoluted tract. Surgical procedure can be executed in few minutes.



## Fissure

The procedure is done under LA-local anesthesia, it does not require hospitalization of a patient. By the use of laser the pathological tissue of anal fissure is vaporized. The laser removal of a fissure has great efficiency rates. It is the most modern technique used to treat a fissure. The laser surgery is the perfect alternate for other methods.

## Pilonidal Sinus

Contrary to conventional methods, laser treats pilonidal sinuses in depth. It is literally non-invasive, completely painless and very therapeutic effect to laser that contributes noticeably to the spectacular healing of pilonidal cyst disease. Laser removes inflammable structures and sinuses. The removal of pilonidal sinus with this laser surgical techniques takes approximately 30 minutes in most cases. When we laser sinuses, collateral damage is minimal. The healing process is thus quicker, easier and mostly without any pain. In the treatment of complete healing and restoration of pilonidal cyst there is no serious risk of recurrence. Recurrences are rare. Laser surgery is clearly better compared to other surgical procedures.



# Laser treatment for Varicose vein ( EVLT )

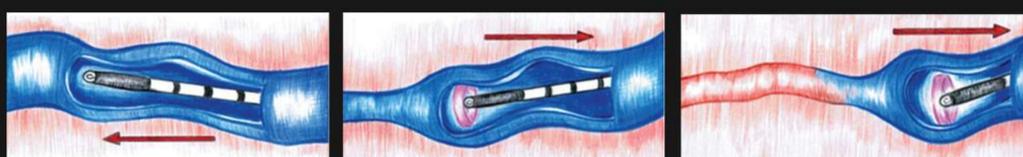


EVLT (Endovenous Laser Treatment) is a procedure leading to occlusion of varicose veins. It involves putting a fiber optic into a saphenous vein through a catheter. Then the laser is turned on and slowly withdrawn from the vein.

Thanks to light tissue interaction mainly thermal effects occur, the tissue is heated and the walls of the vein shrink, because of alteration of endothelium and contraction of collagen.

There are two possibilities of performing the treatment : with pulsed and continuous-wave laser operation. Using the pulsed operation also the fiber is withdrawn step by step. A better choice is to use continuous-wave laser and to withdraw the fiber also continuously, what provides more homogeneous illumination of the vein, less tissue damage outside the vein and better results.

The therapy is just a beginning of the occlusion process. After the treatment the veins are shrinking for several days or weeks. That's why in the long-period observation, very good results are obtained.



# Laser Treatment for Cosmetic Gynecology

## Laser Vaginal Rejuvenation Treatment

A new and innovative technique combines the action of the infrared laser and the Laser hand-piece in order to accelerate the production and the remodeling of mucosa's collagen.

Improvement up to 70% from the first treatment\*

Age and muscular stress often cause an atrophic process within the vagina. If not adequately treated, this results in dryness, sexual difficulties, itching, burning, tissue laxity and urinary incontinence. The main cause of this is the loss of tone of the vaginal mucosa. The Laser treatment targets the vaginal mucosa. The wavelength (15w/1470nm+635nm), combined with the controlled, radial emission of the Laser hand piece, has a bio-modulating effect that stimulates Neocollagenesis and regenerates the epithelium and the connective tissue. This action rejuvenates the mucosa by restoring firmness, flexibility and hydration; therefore, considerably reducing symptoms, that are usually attributes of menopause. Laser also has a positive effect on urinary incontinence, in many cases restoring the normal functions.

The main advantage of using a diode laser is that the laser can penetrate deeper, targeting the mucosa, without causing an ablative thermal injury.

The design of hand-piece and the circular emission are the uniqueness of the Laser. They allow for a painless treatment. The combination also ensures that the laser evenly targets all tissue on the inner walls of the vagina.

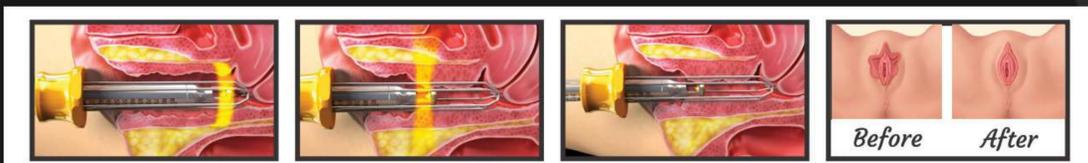
Although the software is easy to use with suggested settings, the surgeon can also manually alter the settings according to the requirement of the surgery. Additional hand pieces are available for internal and external vulvae treatments, as well as aesthetic microsurgery.

## LASER VAGINAL REJUVENATION TREATMENT WITH ONE SOLUTION

AR Photonics Laser is a complete solution that treats a wide range of feminine indications. It provides effective care for a highly diverse range of needs, including:

- ▶ Vaginal Tightening
- ▶ Stress Urinary Incontinence (SUI)
- ▶ Vaginal Dryness & Recurrent Infections
- ▶ Post - Menopause - GSM
- ▶ Post - Delivery Rehabilitation

### Vaginal Treatment Procedure



- ▶ Increased Collagen
- ▶ Improved Muscle Tone
- ▶ Improved Sensation
- ▶ Reduced Vaginal Dryness
- ▶ Enhanced Orgasm
- ▶ Fully outpatient process without anesthesia
- ▶ No side effects
- ▶ Effective and painless
- ▶ Non-invasive



# Laser treatment for Liposuction

## Laser Technology

Laser powered by the 15w/1470nm+635nm diode device along with recent innovations brings the cutting edge technology to Tumescent Liposuction, including targeted fat removal with minimal bleeding and bruising with less physician exertion and a faster recovery in patients.

The Laser system consists of a 15w/1470nm+635nm wavelength device, which specifically targets fat-water absorption with the combined capability of infiltration and suction. The device has an integrated cannula and fiber interface for simultaneous lasing and suction.

AR Photonics device is most beneficial in the treatment for efficient fat-emulsification and removal of fatty tissues.

The unique radial and bare emitting fiber of the device helps in wider and even-heat emission distribution, with precise temperature control capabilities. The results are improved skin tightening, reduced procedure time, high-fat viability for successful grafting and superior clinical results.

## Optimal Wavelength

AR Photonics laser device operates in the 15w/1470nm+635nm wavelength, which precisely targets water in soft tissues. It features a higher absorption rate of water and fat than all other competing devices. The device allows for optimized fat removal, with minimum tissue damage. Laser energy is delivered at a low power density for maximum safety, minimizing the risk of burns.

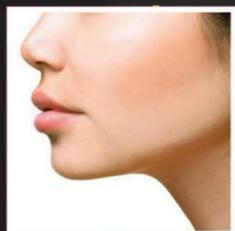
## Liposuction Cannula

Liposuction cannula helps break up fatty tissue so that it can be easily suctioned and removed from the body. Small precise oscillations allow surgeons to target specific areas safely without damaging the surrounding tissue. This technique is especially useful for treating areas with dense and fibrous adipose tissue.

Cannula combined with simultaneous lasing and suction allows surgeons to remove fat more quickly with ease and less manual force. This results in less bruising and shorter recovery time and more comfortable experience for both surgeon and patient.



Before



After



Before



After



Before



After



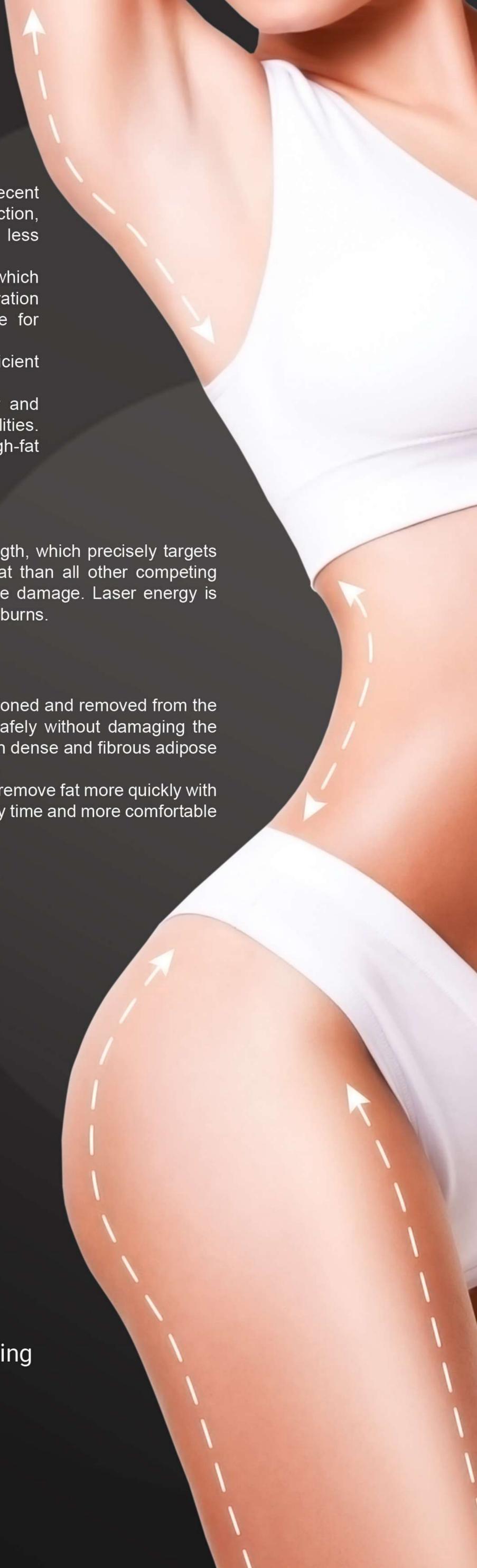
Before



After



- ▶ Reduced Bruising and Swelling
- ▶ Precision Sculpting
- ▶ Skin Tightening



# Laser Treatment for PLDD

PLDD a minimally invasive procedures for managing radicular spine pain.

PLDD procedures are performed under local anesthesia. An optical fiber is inserted into a working cannula under fluoroscopic guidance. Using fluoroscopy alongside a contrast medium, the cannulas position and the condition of the disc bulge can be confirmed. The laser will then initiate decompression and lower intrasectoral pressure.

A posterior-lateral approach with no interference to the vertebral canal, PLDD minimizes the possibility of damaging the dural sac when operating on higher segments or spinal roots. It is important to note this is a reparative treatment and will not reinforce the annulus fibrosis. Using the laser to perform disc decompression results in a small amount of the nucleus pulposus evaporating; meaning there is a minimal decrease in the volume of the disc, however disc pressure can be significantly reduced.

## Main indications

- ▶ Degenerative disc disease
- ▶ Bulging disc
- ▶ Pinched nerve (nerve root compression)
- ▶ Sciatica

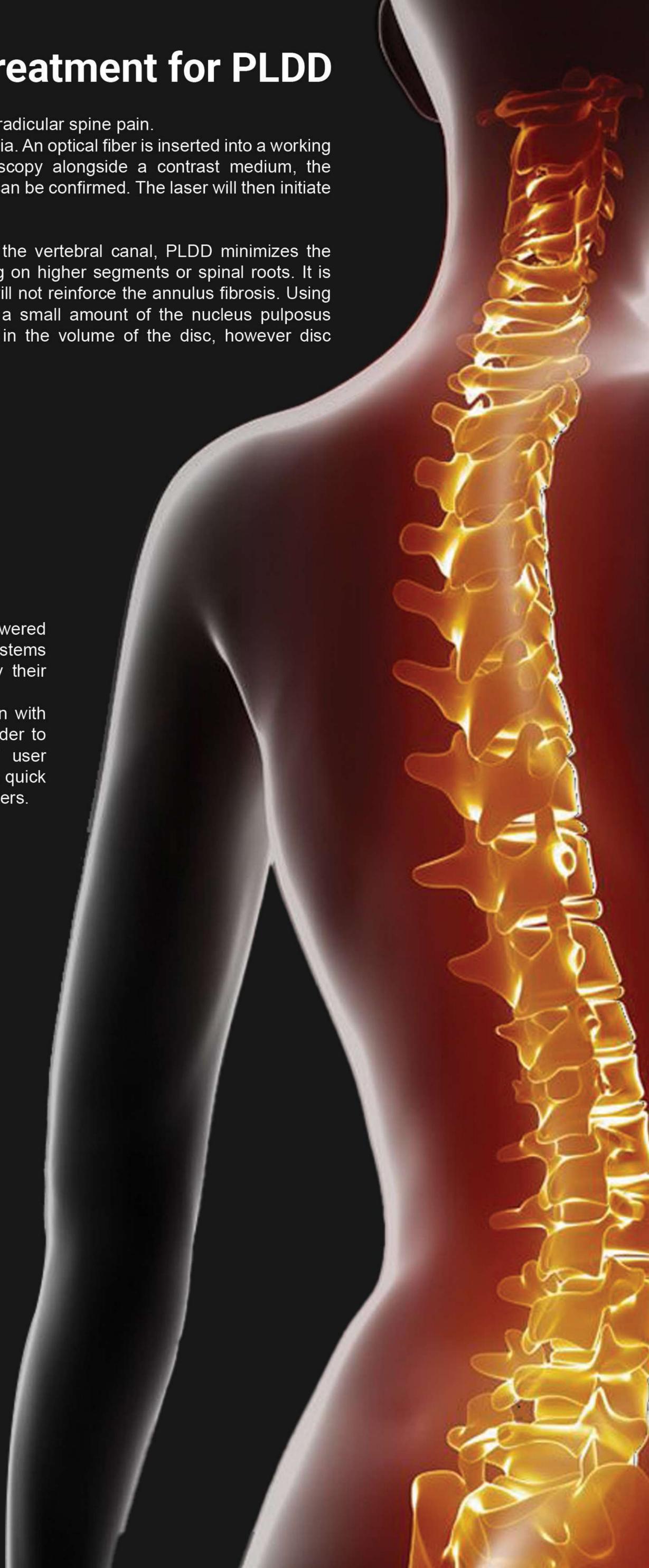
## User friendly software

The diode laser made by AR Photonics is a high-powered surgical laser, expertly manufactured in Canada. All systems in the unit are carefully selected and monitored by their internal R&D division.

AR Photonics laser has high definition touch screen with excellent color quality and a wide field of view in order to provide the operator with ease of use. Individual user settings can be saved on the device, allowing for the quick and easy selection of personalized treatment parameters.

## Advantages of PLDD

- ▶ Day Care Procedure
- ▶ No General Anesthesia
- ▶ No Arthrodesis (fusion)
- ▶ Minimally Invasive
- ▶ Excellent Patient Outcomes
- ▶ Minimal Recovery Time
- ▶ Minimal Scar Tissue Formation



# Therapy for Wound Healing

AR Photonics diode laser is a multi functional medical device designed to perform precise haemostatic incisions, controlled coagulation and soft tissue regeneration. Specially designed optical systems enable operation with different complementary wavelengths (1470 nm, 635 nm). Equipped with a flexible quartz optical fiber and a broad selection of hand pieces, the laser guarantees a unique range of applications in contact microsurgery, percutaneous vascular closure, phrenology and proctology, aesthetic medicine as well as stimulation of post-surgical wound and ulcer healing. Owing to appropriately selected radiation parameters, the effectiveness of procedures is exceptionally high. The unique versatility of diode lasers, their small size and weight makes them indispensable equipment in every modern medical office.

Laser bio modulation accelerates wound healing and promotes treatment of diverse types of epidermis and dermis damage. The procedure involves stimulating soft tissue regeneration and cell proliferation, as well as inhibiting the inflammatory process and reducing the pain experienced by the patient. It shortens treatment time and reduces patient trauma. The application of the 635 nm AR Photonics laser gives excellent results in the treatment of chronic wounds such as venous ulceration of the shin, diabetic foot syndrome, burns, cuts, discoloration, etc. According to clinical studies, wounds treated with laser therapy heal almost twice as fast and are less likely to develop complications. Furthermore, the use of laser light reduces pain, swelling, inflammation and exudate that accompanies chronic wounds.

## 635 nm Applications

- ▶ Bio modulation of chronic wounds
- ▶ Promotion of healing
- ▶ Venous leg ulcer
- ▶ Diabetic foot syndrome
- ▶ Burns
- ▶ Cuts
- ▶ Discolorations

## Why AR Photonics Laser ?

- ▶ Navigated treatment with laser precision
- ▶ Time saving for the patient and the doctor
- ▶ Effective treatment with fewer visits
- ▶ Noticeably higher revenues for the practice
- ▶ Working with the best wavelengths
- ▶ No need for hospitalization in the postoperative period
- ▶ Safe and effective medical procedures
- ▶ More satisfied patients who recommend the services to other people



## CASE STUDY



Before



5 Weeks



7 Weeks



Before



4 Weeks



8 Weeks



- ▶ Faster Healing
- ▶ Reduced Pain and Inflammation
- ▶ Minimized Scarring

# Specification

Model Name	Pulse - ARD
Laser Mode	GaAs Dide Laser
Laser type	Diode, Semiconductor
Wavelength	1470nm+635nm
Max Power	15 watts
Aiming beam	635nm, < 5mw
Operation Mode	Continuous or pulsed
Pulsed Time	0.05ms~1000ms
Beam Delivery	SMA905 connector
Optic Fiber Compatible	Optic fibers having a core from 200um to 1000um, NA=0.22~0.48
Beam Emission Initiation	Footswitch
Controller	Microprocessor
Display	10.1" IPS with touch panel Medical approved
Cooling	Internal, air and thermoelectric cooling
Power supply of the laser	DC 24V/8.33A from the separate AC
Power supply of AC adapter	Single phase 100~240VA; 50-60HZ, Max 90w
AC Adapter	DC 24V/8.33A Medical approved
Laser Dimensions	27cm* 11cm*19 cm length*width*height
Laser weight	2.75kg
Laser case dimensions	56cm × 35cm × 23cm
Weight of laser with cases	9kg
Environmental conditions during work	From +10 to 24°C degree, relative humidity from 30% up to 60%
Cass of Medical Device	IIB
Laser safety Class	4
Electric Safety Class	I type B
Housing Protection Degree	Ip20b
Footswitch Protection Degree	IPX6

