



We don't just build technology  
**We build confidence**



Proctology, Varicose vein,  
Liposuction, Cosmetic Gynecology, PLDD

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



We Offer Diode Lasers with 15w/1470nm wavelength for Proctology, Varicose vein ( EVLT), Cosmetic Gynecology, Liposuction & PLDD



Emergency Switch



Touch Screen Interface

## Accessories



Safety Goggle



Foot Switch



Carrying Case



Proctology Handpiece



Bare Fiber



Radial Fiber



Conical Fiber  
(Optional)



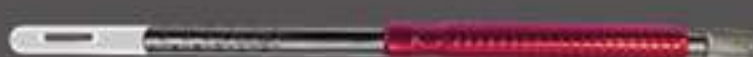
Permanent Fiber  
(Optional)



Disposable Tips  
(Optional)



Proctology Hand piece  
( Optional )



SUI ( Stress Urinary Incontinence ) Hand piece  
(Optional)



LVR Hand piece  
(Optional)



# Laser treatment for Proctology

## Hemorrhoids



Under LA/GA, laser energy is delivered by radial fiber directly to hemorrhoid 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 hemorrhoid pile by a shrinkage effect. Advantage of using laser compared to conventional surgery, fibroid 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 crust 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.



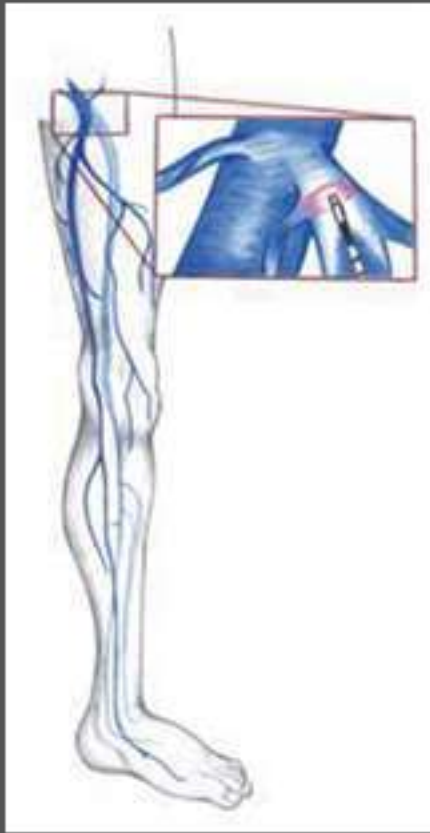
## Benefits of using diode laser

- ▶ Minimal Invasive
- ▶ Day care Procedure
- ▶ Less bleeding, Less trauma
- ▶ Faster Healing
- ▶ Scarless Treatment





## Laser treatment for Varicose vein ( EVLT )

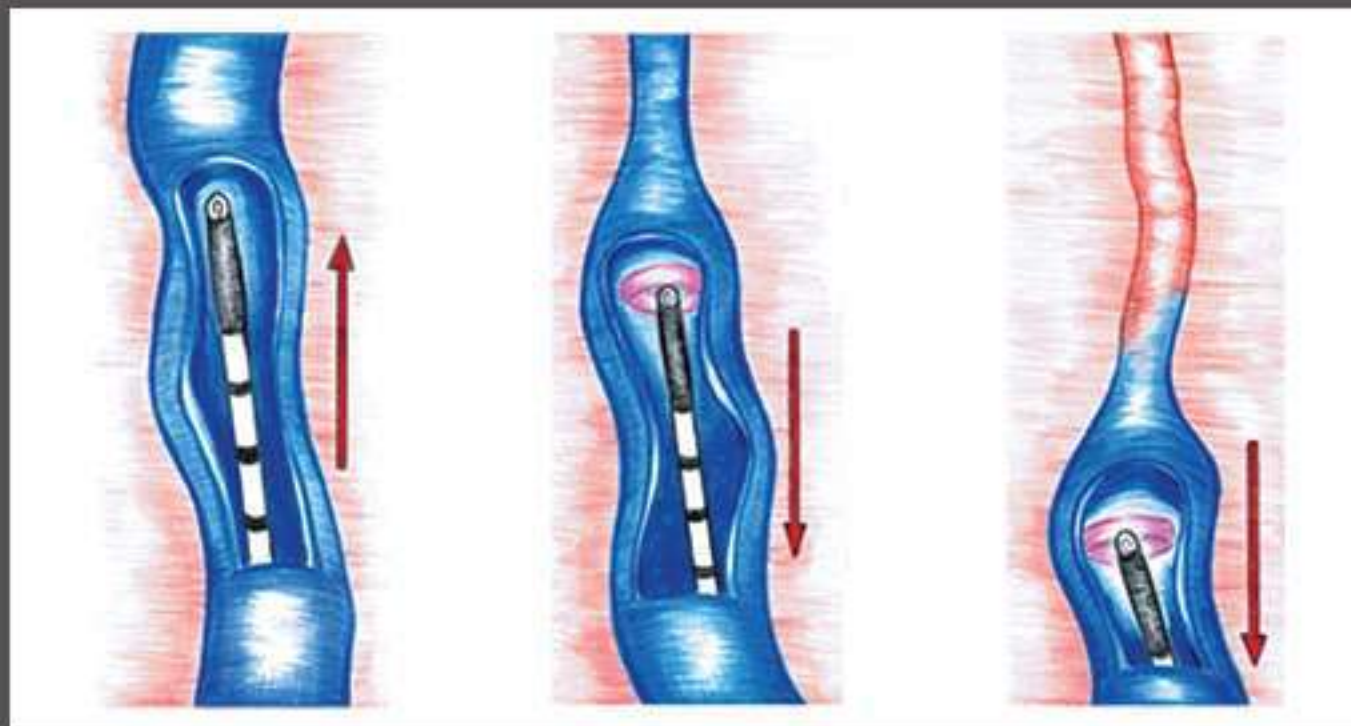


EVLT (Endovenous Laser Treatment) is a procedure leading to occlusion of varicose veins. It involves putting a fiber optic into a saphenous vein through a catheter. Then the laser is turned on and slowly withdrawn from the vein.

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 homogenous 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,



## Advantages of Varicose vein ( EVLT ) laser treatment

- ▶ High success rate
- ▶ Low recurrence rate
- ▶ Quick treatment
- ▶ Minimal invasion
- ▶ Quick Recovery





# Laser Treatment for Liposuction

## Laser Technology

Laser powered by the 1470nm diode device along with recent innovations brings the cutting edge technology to Tumescant 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 1470nm 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 1470nm 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

- ✓ Minimally Invasive
- ✓ No Downtime
- ✓ Wonderful Results





# 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 (1470nm), combined with the controlled, radial emission of the Laser hand piece, has a bio-modulating effect that stimulates Neocolonialisms 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 vulvar 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



## Benefits of Laser Cosmetic Gynecology treatment

- 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 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 fluoroscope 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 intradiscal pressure.

A posterior-lateral approach with no interference to the vertebral canal, PLDD minimises 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 populosus 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.

The 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





## Specification

Model Name	Pulse - ARS
Laser Mode	GaAs Dide Laser
Laser type	Diode, Semiconductor
Wavelength	1470nm
Max Power	15 watts
Aiming beam	635nm, < 5mw
Operation Mode	Continuous or pulsed
Pulsed Time	0.05ms~1000ms
Fiber Connector	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	12kg
Environmental conditions during work	From +10 to 24°C degree, relative humidity from 30% up to 60%
Class of Medical Device	IIB
Laser safety Class	4
Electric Safety Class	I type B
Housing Protection Degree	Ip20b
Footswitch Protection Degree	IPX6

