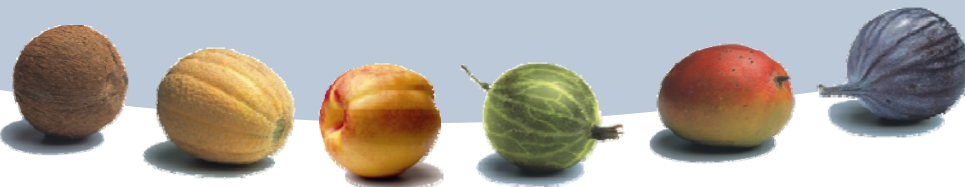


**WaveLight**  
Aesthetic GmbH

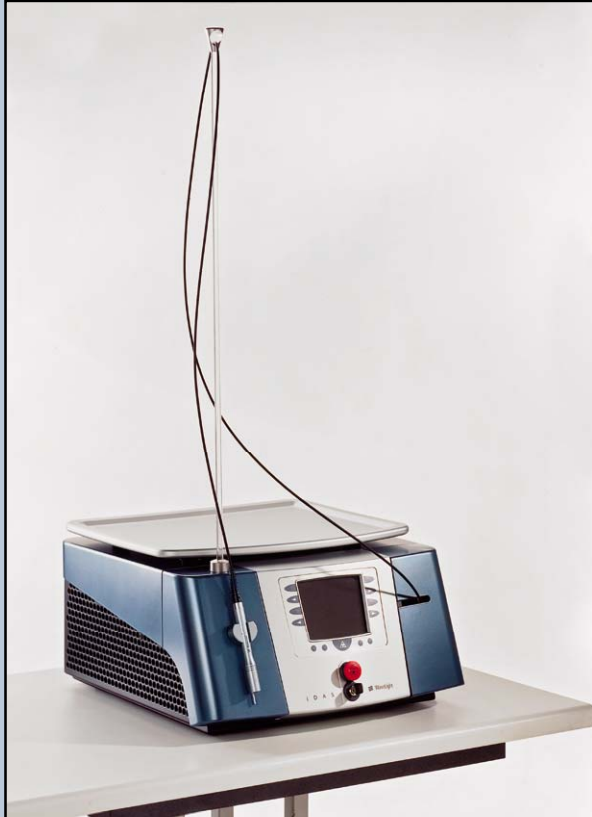
**IDAS News**




Dr. Thomas Knorr

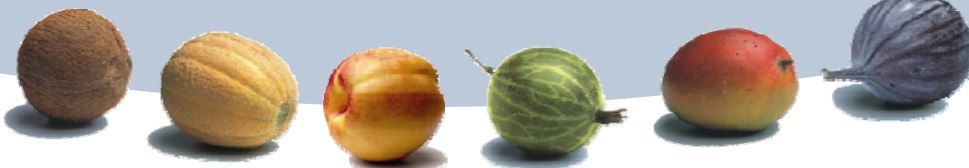
Team Manager Application Development



# IDAS – 532 nm Laser System

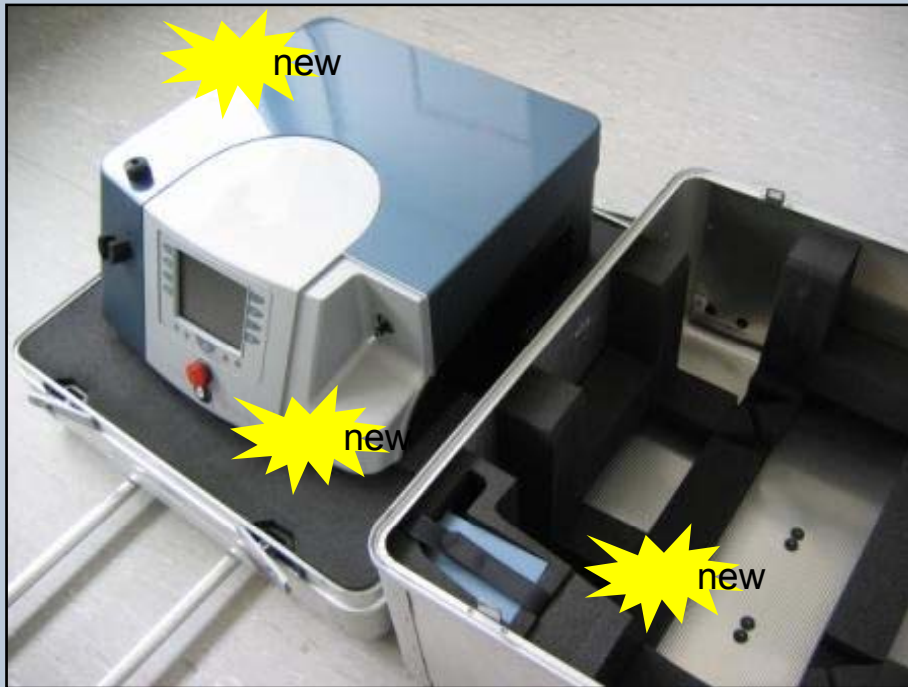


- Superficial Vascular Lesions
  - Red superficial veins of the legs and face
  - Rosacea
  - Teleangiectasia
  - Hemangiomas
  - Spider Naevi
  - Spider veins
  - Port wine stains
- Pigmented lesions
- Endoluminal laser therapy  new
- ENT (Ear-nose-throat treatment)  new (not in the USA)
- Acne treatment  new

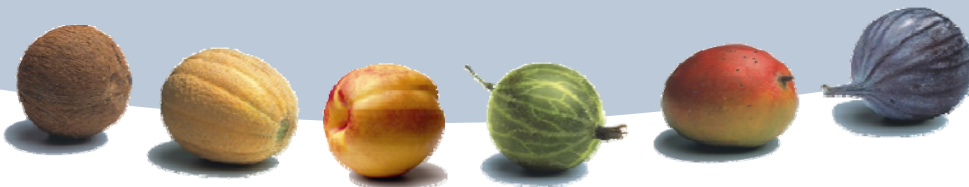


# IDAS – 532 nm Laser System

New Design for ELT and ENT (easy change of single use fibres)



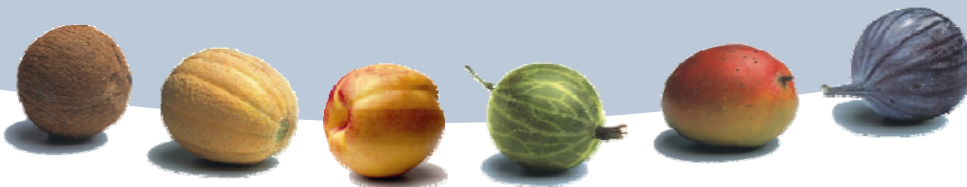
- No more tray
- Fibre connection cover totally removable
- More lightweight
- Better for frequent replacement of fibres



# IDAS

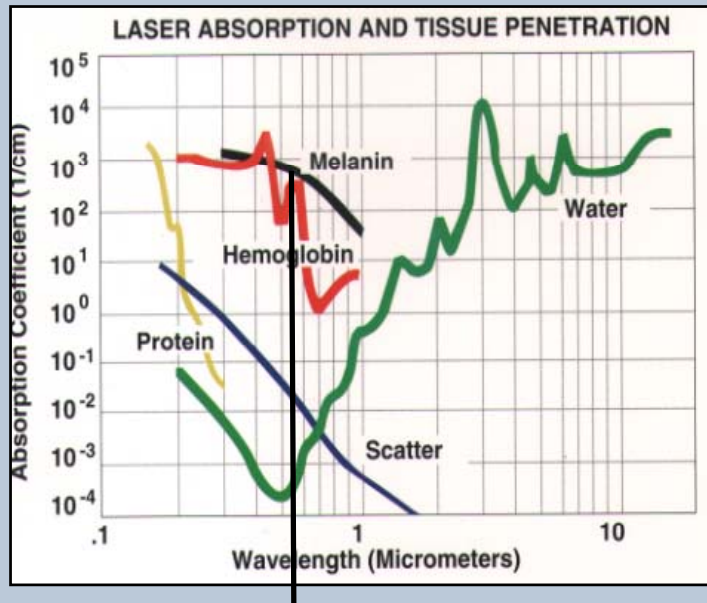
## Technical Specifications

Laser type	Solid state laser
Laser class	4
Wavelength	532 nm
Power	8 W
cw	Bare fibre
Beam diameter	0.2 / 0.5 / 0.7 / 1.0 / 2.0 mm lens adapters
Beam delivery	Fibre optic light guide
Skin cooling	Cold-air unit (optional)
Device cooling	Air cooling
Power requirements	115 - 208 V, 10 A, 50/60 Hz
Dimensions (L x W x H)	41 x 43 x 20 cm
Weight	Approximately 25 kg



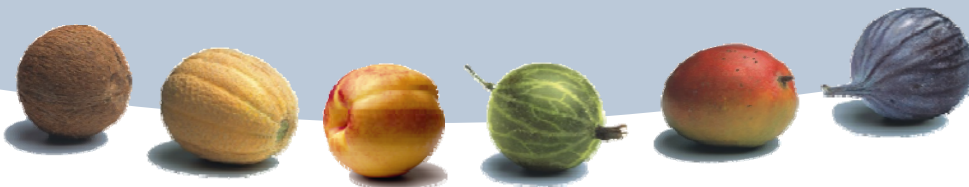
# IDAS

## Why IDAS for Superficial Vascular Lesions?



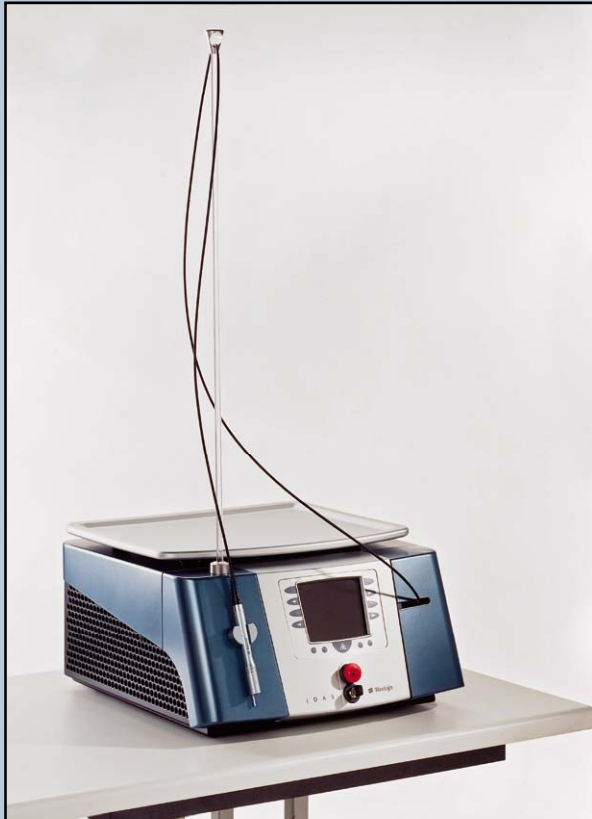
532 nm laser

- Powerful laser with 8 Watt: required fluence can be applied in a very short time
- Wavelength of 532 nm has excellent absorption in hemoglobin
- Treatment of many vessel diseases due to the broad range of spot sizes

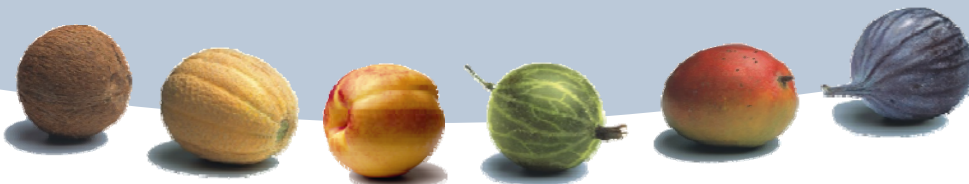


# IDAS

## Product Highlights



- Powerful **8 Watt** 532 nm Laser
- Several spot sizes enable an exact modification of the treatment to a variety of individual vessel lesions
- **Efficient** non-invasive treatments
- Broad application range



# IDAS

## Treatment of Superficial Vascular Lesions

Patient A: 34 year old female – Rosacea – Right cheek  
First treatment: 0.7 mm spot: 25 J/cm<sup>2</sup>, 20 ms



Before treatment



During treatment

*Photograph Courtesy of Uwe Paasch, M.D., University Hospital Leipzig*



# IDAS

## Treatment of Superficial Vascular Lesions

### Patient A: Right cheek

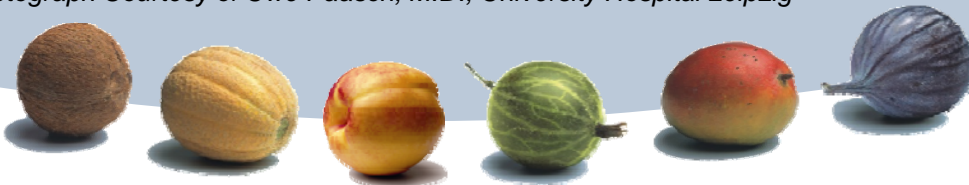


Before treatment



After first treatment

*Photograph Courtesy of Uwe Paasch, M.D., University Hospital Leipzig*



# IDAS

## Treatment of Superficial Vascular Lesions

Patient A: left cheek

First treatment : 0.7 mm spot: 25 J/cm<sup>2</sup>, 20 ms



Before treatment



After first treatment

*Photograph Courtesy of Uwe Paasch, M.D., University Hospital Leipzig*



# IDAS

## Treatment of Superficial Vascular Lesions

Patient B: 44 years old female – Telangiectasia Left cheek

First treatment: 0.7 mm spot: 18 J/cm<sup>2</sup>, 20 ms

Two more treatments with 20 J/cm<sup>2</sup>, 20 ms



Before treatment



During treatment

*Photograph Courtesy of Uwe Paasch, M.D., University Hospital Leipzig*



# IDAS

## Treatment of Superficial Vascular Lesions

Patient B: 44 years old female – Telangiectasia Left cheek

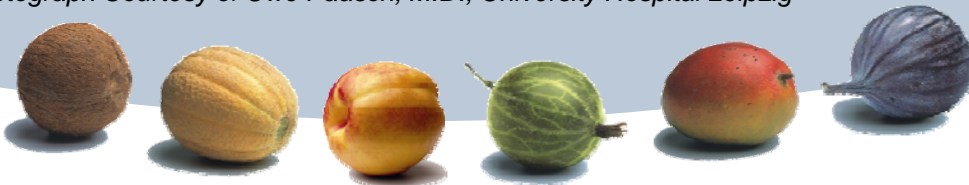


Before treatment



After treatment

*Photograph Courtesy of Uwe Paasch, M.D., University Hospital Leipzig*



# IDAS

## Treatment of Superficial Vascular Lesions

Patient B: 44 years old female – Telangiectasia Right cheek  
First treatment: 0.7 mm spot: 18 J/cm<sup>2</sup>, 20 ms



Before treatment



Directly after first treatment:  
Redness

*Photograph Courtesy of Uwe Paasch, M.D., University Hospital Leipzig*



# IDAS

## Treatment of Superficial Vascular Lesions

Patient B: 44 years old female – Telangiectasia Right cheek



Three days after first treatment



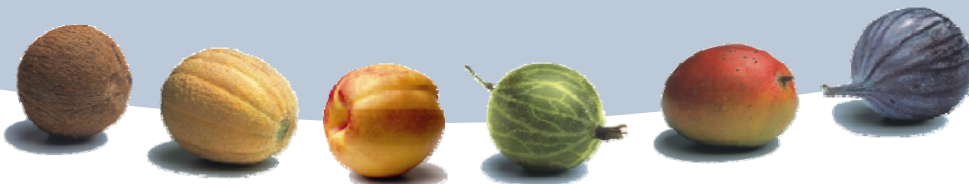
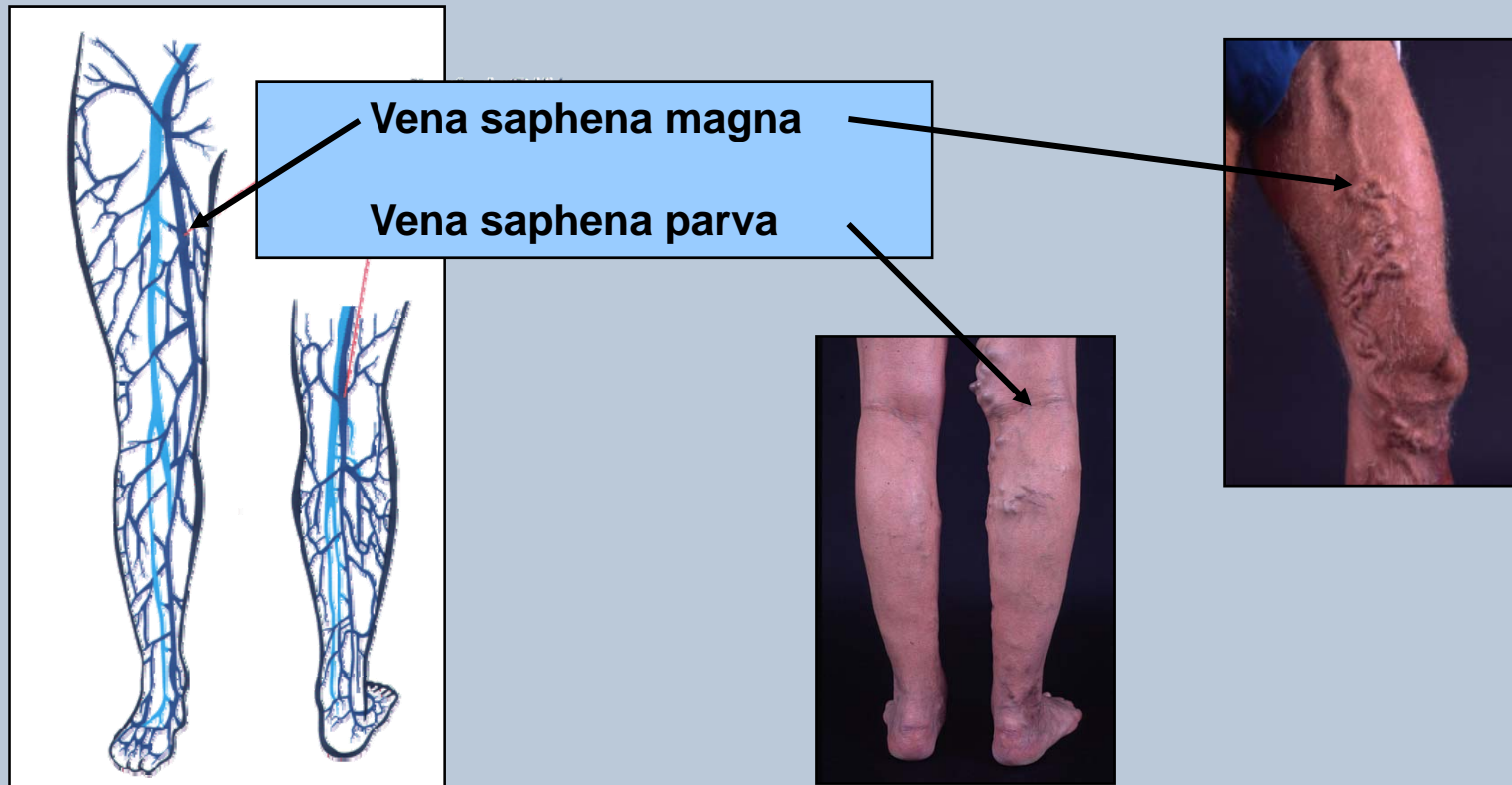
Six months after therapy

*Photograph Courtesy of Uwe Paasch, M.D., University Hospital Leipzig*



# Endoluminal Laser therapy (ELT)

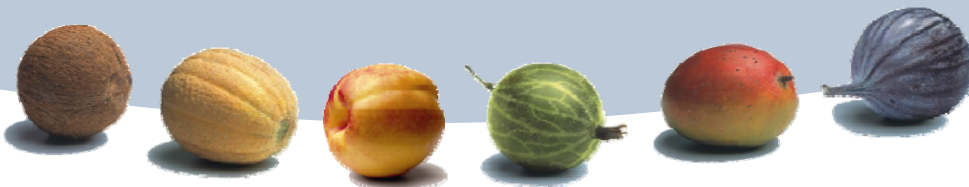
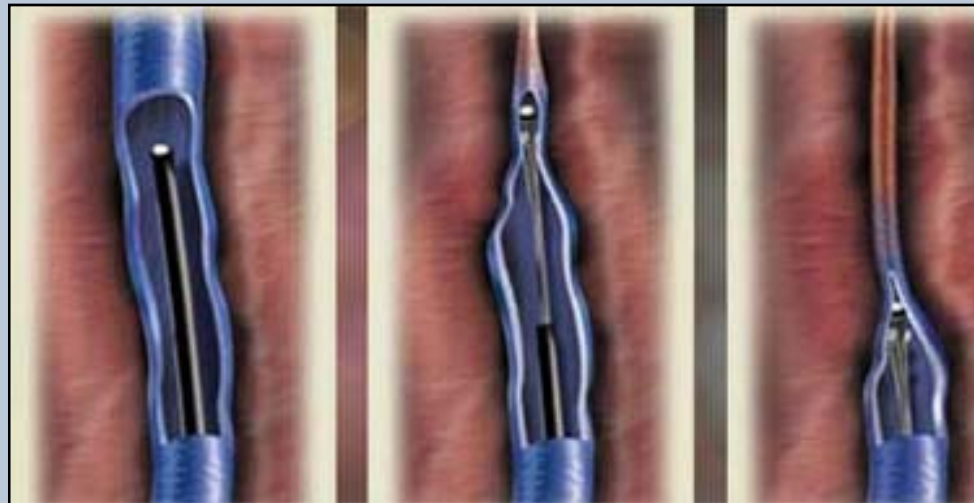
- Sclerotherapy of varicose veins with laser light



# Endoluminal Laser therapy (ELT)

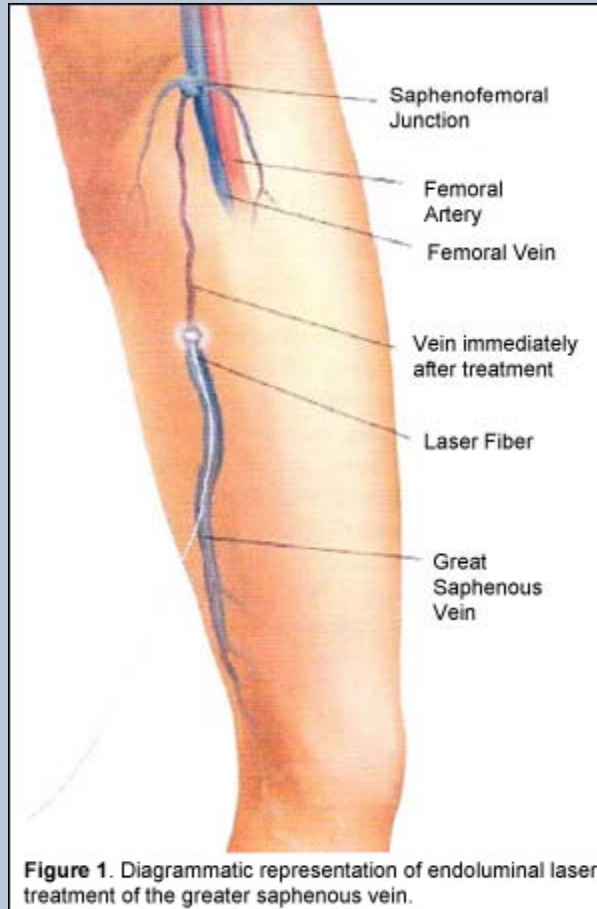
## Principle

- Energy of the laser is absorbed by the hemoglobin and converted to heat
- Vessel inside temperature is increased to 60 – 70°C
- Coagulation of the blood and destruction of the vessel walls → degradation
- Outside the vessel  $T < 41^{\circ}\text{C}$  → no side effects

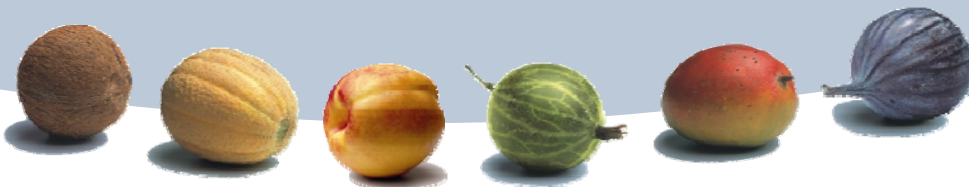


# IDAS

## Endoluminal Laser therapy (ELT) – How to Do



- Surgery under local anaesthesia (tumescent anaesthesia)
- Only puncture of the varicose vein at the distal end!
- Delivery of laser energy directly into the blood vessel lumen to produce endothelial and vein wall damage with subsequent fibrosis.

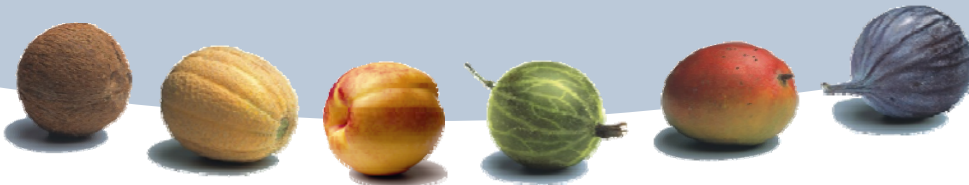


# IDAS

## Clinical Results



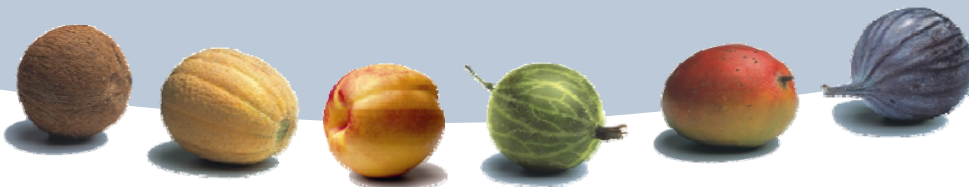
Harbin Clinic Vein Centre: Dornier D940 Laser System



# Endoluminal Laser therapy (ELT)

## Advantages

- Very gentle surgery
- Prevention of general anaesthesia, suitable for older patients with a higher anaesthetic risk
- Very good clinical and cosmetic outcome, nearly no risk of side effects (scar, relapse)
- Short treatment time and short temporary disability (1 – 2 days)
- Low postoperative troubles
- Reasonable priced surgery, because multiple diseased varices can be treated in one surgery



# IDAS

## Accessories ELT

### *Catheter (curved, straight)*

- 60 cm
- 80 cm

### *Guide wire (straight)*

- 120 cm

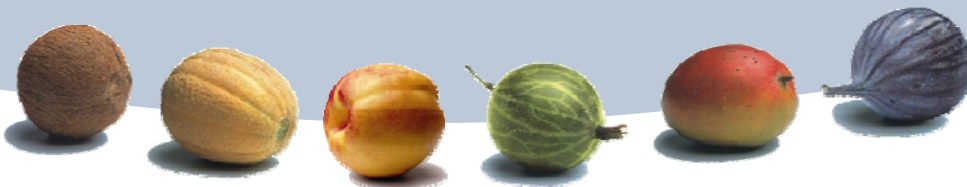
### *i.v. catheter*

- 20 G x 2"
- 20G x 1¼"

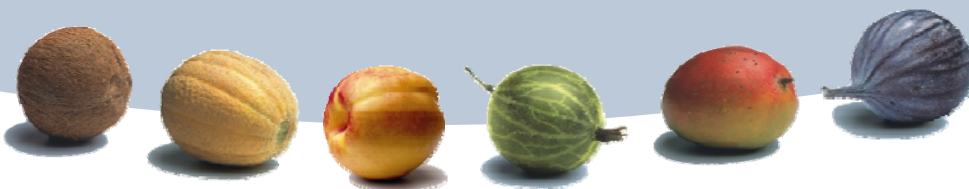
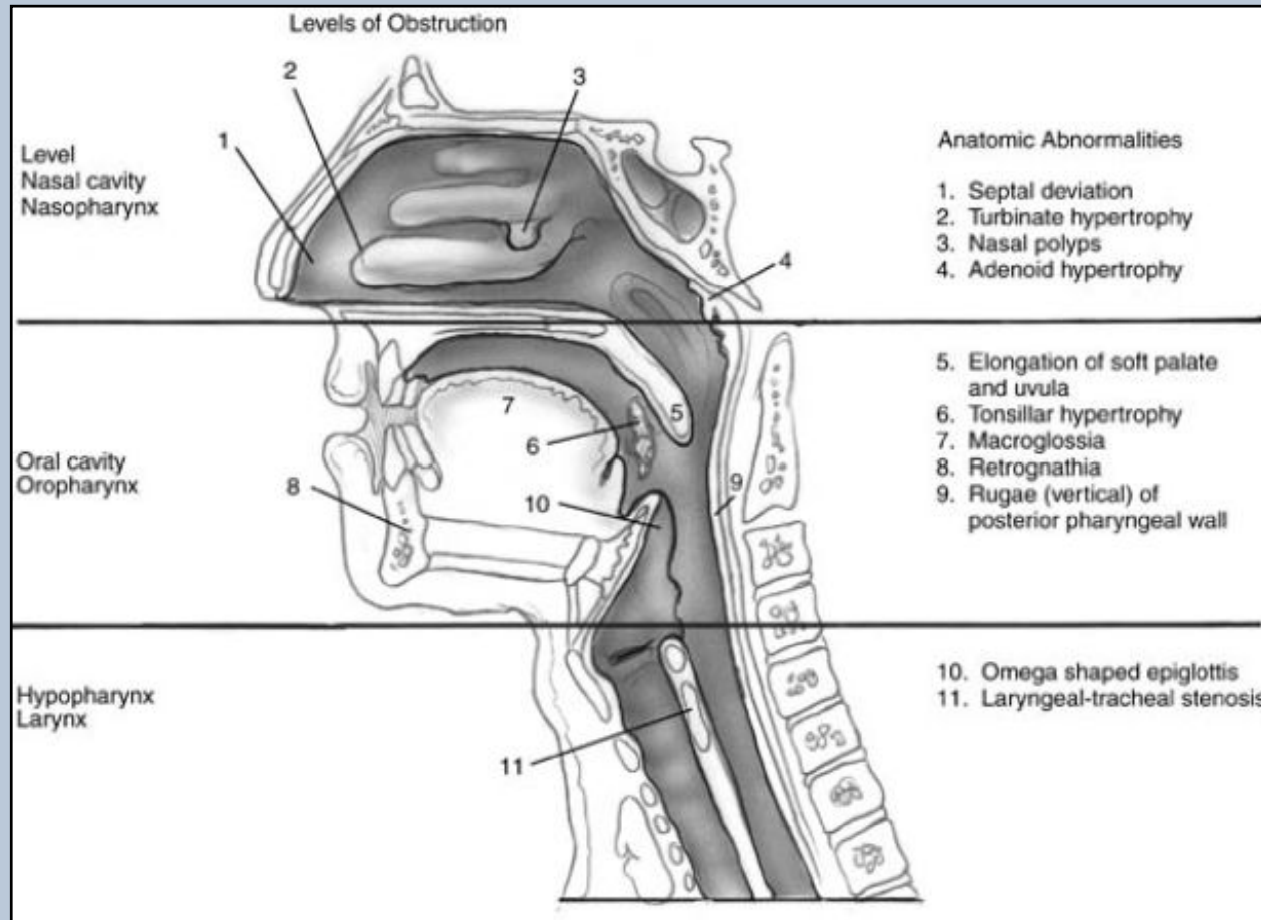


### *Single use fibre*

(640 µm)



# IDAS ENT

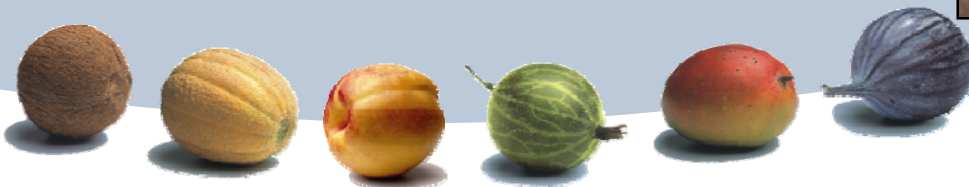


# IDAS

## ENT Indications

### **IDAS is optimal for**

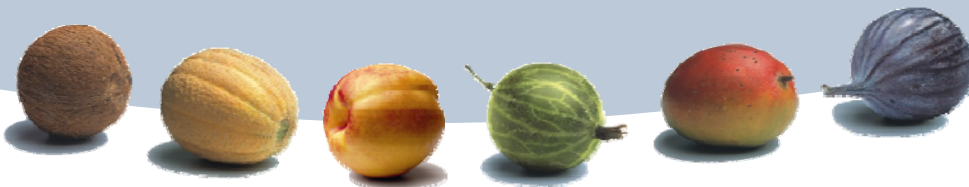
- Conchotomy (reducing of the nasal choncha)
- LAUP (Laser assisted shortening of the uvula against snoring)
- Tonsillotomy / Tonsillectomy (partly or complete removing of the palatine tonsil)



# IDAS ENT

## Settings Used in IDAS Assisted Uvulopalatoplasty (LAUP), Turbimoplasty (LAMT) and tonsillectomy (TE)

	Watts	mode	number of pulses	pulse duration	frequency
<b>LAUP</b>	6(8)	long pulse	depending	200 (400,500) ms	1,6 Hz
<b>LAMT</b>	7	Pulse	100-400	60-90 ms	10 (5) Hz
<b>TE</b>	5(8)	Pulse	depending	50-90 ms	10 (5 or 2) Hz



# IDAS

## ENT Accessories

Bare Fibre or ENT



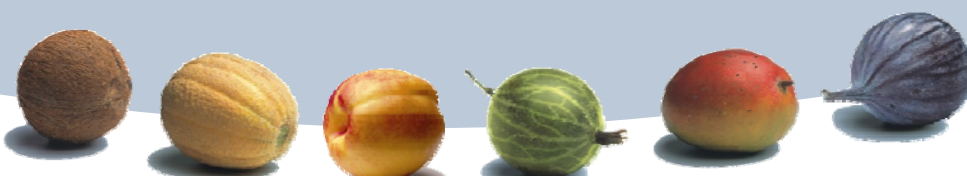
Fibre Stripper for ENT



Fibre Cleaver for ENT



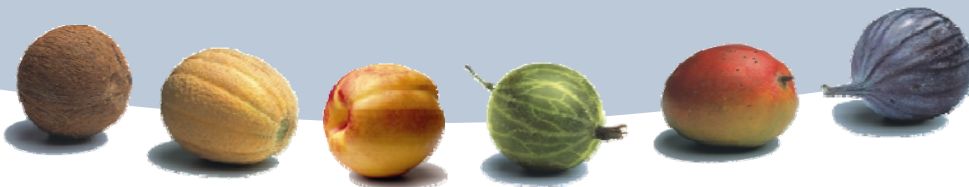
Handle ENT bare fibre with different cannula



# IDAS ENT

## Advantages to cold steel

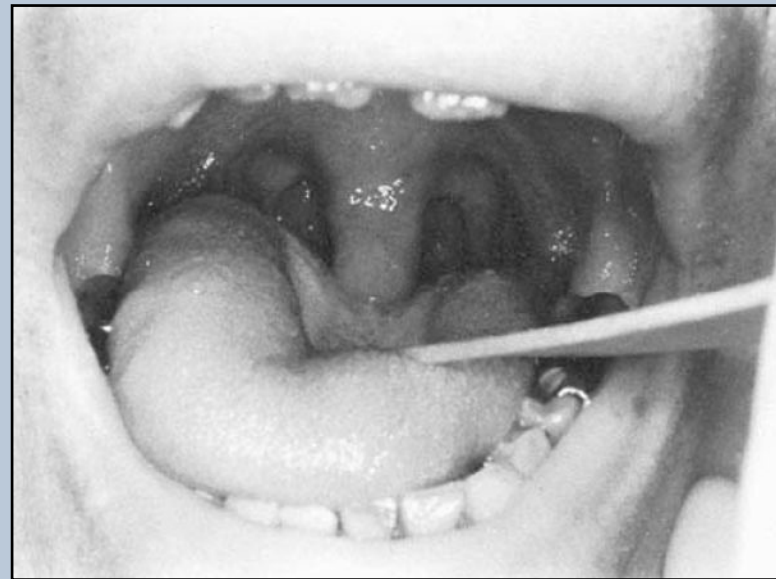
- No nasal packing
- No general anesthesia
- No pain or bleeding
- Immediate recovery
- Low risk of chronic nasal crusting
- Quicker in cutting mode
- Low initial bleeding
- Low rate of late bleeding



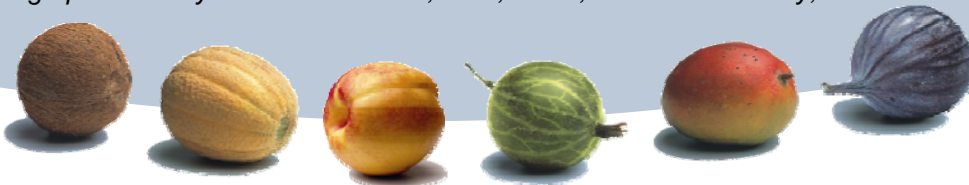
# IDAS

## ENT – Treatment examples

After laser treatment



*Photograph Courtesy of Vaclav Pavelec, M.D., Pd.D., Charles University, Plzen*



# IDAS

## ENT – Treatment examples



Before laser treatment



After laser treatment

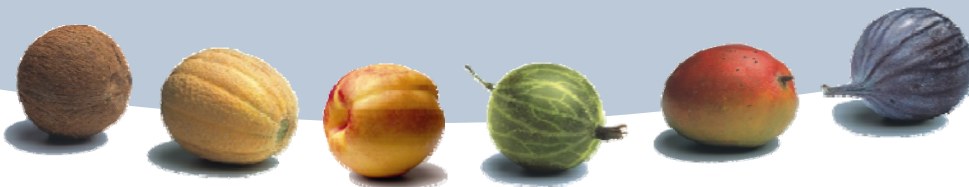
*Photograph Courtesy of Vaclav Pavelec, M.D., Pd.D., Charles University, Plzen*



# IDAS

## Further ENT indications

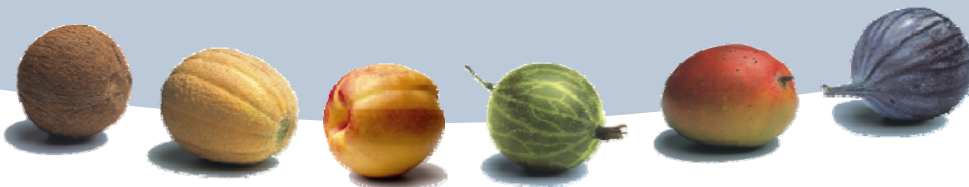
- Ablation of papilloma and leukoplakia
- Excision of granuloma, polyps and ranula
- Stapedotomy
- Excision of acoustic neuroma
- Tympanoplasty
- Functional sinusectomy



# IDAS

## Advantages of IDAS ENT surgery

- Local anesthesia is sufficient (no general anesthesia)
- Optimal hemostatic effect (532 nm) of the IDAS avoids bleeding also after the treatment
- Outpatient treatment
- Fast wound healing (low amount of fibrin creation after surgery)
- No knife, just laser radiation
- 8 Watt power of IDAS (3 to 5 Watt is not sufficient for ENT)



# Thank you for your attention

Vielen Dank für Ihre Aufmerksamkeit

תודה על הקשבה / תודה על תשומת לב

Tack för er uppmärksamhet

Ευχαριστώ για τη προσοχή σας

Faleminderit për kujdesin tuaj!

Takk fyrir að hlusta

Merci pour votre attention

너의 주의를 위해 너를 감사하십시오

Takk for oppmerksomheten

dziękuję za waszą uwagę!

Спасибо за внимание

hvala lepa za vašu pozornost

Ďakujem za vašu pozornosť

Dank U voor uw aandacht

Ačiū už dėmesį

გმადლობთ ყურადღებისათვის

Tānan tāhelepanu eest

obrigado pela sua atenção

शुक्रिया आपके ध्यान के लिए

شكراً على اهتمامكم

Дзякуй за увагу

děkuji (vám) za vašu pozornost

Mulțumesc pentru atenție

Dikkatiniz için teşekkür ederim

Hvála za vašo pozórnost

дякую за вашу повагу

Kiitos huomiostanne

Grazie per la vostra attenzione!

谢谢 (麻煩你了)

ご清聴ありがとうございました

paldies par uzmanību

Tak for opmærksomheden

Köszönöm a figyelmüket!

Благодаря за вниманието

