



## Easy to operate A large display clearly

indicates all treatment parameters. Cryo 6 features a tactile glass keyboard, which permits the selection of 6 preset programs.

Select a program. Press Start. That's it!



arm facilitates hand free 3 supplementary storage operation.

The light weight application hose can be connected Storage possibility is to selected laser hand- available for the user's pieces. The user can easily favorite program. This regulate the air flow as program appears when needed.



possibilities are available Room air is filtered and for user defined programs. cooled down to -30°C

the Cryo 6 is turned on and at the conclusion of each treatment.

treatment efficiency and state-of-the-art precision.



# 

Individual, Favorite and Sequence Program Storage – 3 user-oriented features providing utmost



- designed glass shelf just where you need it – for a laser, smoke evacuator



- Cost efficient: no consumable or additional costs
- Powerful: full day operise easy to access, just ation with no downtime vacuum when dirty.
- or accessories.



by closed cooling circuit.

- Practical: a custom-



## **Easy Maintenance**

A monitoring system measures the defrosted water level and a defrosting feature provides smooth-running daily operation. The air filter

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### **Technical Data**

220-240 V / 50 Hz Power supply

240 V / 60 Hz 100-120 V / 50-60 Hz

Class I, Type B

1 KW Power input max.

260 W / h Stand-by function

Protection according to IEC 601-1

MDD / MPG Class IIa

Treatment tube length 180 cm

Housing dimensions H 645 mm / W 390 mm / L 680 mm

Weight 60 kg

9 levels, max. 1000 I / min Therapy air flow

6 programs combining air flow and treatment time 3 user defined programs 1 favorite user defined program

Set up Menu Service Menu



Articulating arm



Adapter & Clips



Treatment hose



cryo

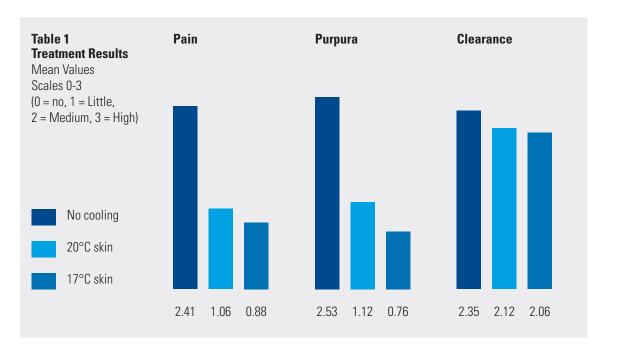


# Cryo

# Evaluation of different temperatures in cold air cooling with Pulsed-Dye Laser

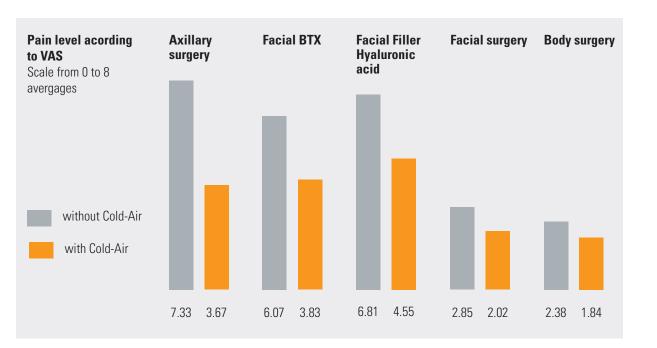
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# Painreduction during skin injections by cold air application

Dr. Markus Steinert, Laserclinic Dr. Steinert, Biberach, Germany



## The skin cooling system designed for superficial laser skin procedures.

The Crvo 6 cold air device is intended to minimize pain and thermal injury during laser and dermatological treatments and for temporary topical anesthetic relief for injections.

Unlike other cooling methods, such as contact cooling, cryogen spray or ice packs, the Cryo 6 can cool the epidermis before, during and after the laser energy has been applied, without interfering with the laser beam.

## Background and Objectives

Cold air cooling is widely used in dermatological laser therapy. We investigated the influence of cold air cooling at different skin temperatures on therapeutic outcome and side effects of pulsed dye laser treatment of facial telangiectasia.

## Study Design / Materials and Methods

From September 2002 to February 2003, 17 patients with previously untreated facial telangiectasia underwent a single treatment session with flash-lamp pulsed dye laser (3.5 J / cm<sup>2</sup>, 585 nm, 0.45 milliseconds pulse length, 10 mm pain, clearance, and pati- to 17°C reduced purpura was divided into three sub-areas: no cooling, cold (meaning »high«). air cooling to 20°C and to 17°C skin temperature.

stream (Cryo 5).

Without cooling, purpura The skin temperature was (2.53), pain (2.41), and monitored by a prototype clearance (2.35) were infrared sensor system rated medium to high. which controlled the Cooling to 20°C redutemperature of the cold air ced purpura (1.12) and pain (1.06), whereas the In a prospective study, we clearance (2.12) was only collected data on purpura, slightly affected. Cooling from 0 (meaning »no«) to 3 was lowered marginally. Most patients preferred

perature.

### Results

beam diameter, Cynosure ent satisfaction on nume- (0.76) and pain (0.88) even a well-balanced middle 1 V). The treatment area rical analog scales (NAS) more, the clearance (2.06) course. For the practical cooling to 20°C skin tem- a level which the patient

# Conclusion

In dermatological laser therapy of facial telangiectasia, the use of cold air cooling can significantly reduce side effects and increase patient satisfaction while only slightly affecting clearance. Cooling to 20°C skin temperature proved to be use of cold air cooling, we thus recommend cooling to can tolerate without problems and to try to increase the energy densities.

### Material and method

The treatment with and was conducted in halfside prick with the injection comparison.

The force of the air current BTX, Hyaluronic acid or a corresponded with level 5 local anesthetica. of the instrument Cryo 6 by the company Zimmer MedizinSysteme (scale of levels 0-9). Each patient served as his/her own monitoring, as the intervention took place symmetrically on both body halves, the cold air treatment however only on one half. Measured was the subjectively declared pain by means of a visual analog scale of 1-10, whereby 1 indicated no

pain and 10 the most ser- The cold air was applied to **Results** vere imaginable. As pain needle, either to inject

intradermal injection.

the patients during the in- All patient groups had without cold air application occurence was applied the terventions. The fan level significantly less pain after 5 of the instrument Cryo the treatment with cold air 6 (company Zimmer Me-than without cold air. This dizinSysteme, Neu Ulm) also corresponds with the was used. The cooling was well studied pain reduction applied during the comple- effect of cold air. Cold air te duration of the injection relieves pain reliably in (approx. 1-2 minutes). cosmetical interventions. Used was an exact cool air Especially significant was nozzle opening of 5 mm. the pain relief during the The distance between the non-surgical treatments cool air nozzle opening and with injections of Botulithe skin surface was 3 cm. numtoxin and Hyaluronic Used were Hyaluronic acid acid-fillers. Cold air reliably products of the company reduces the pain of the Zimmer MedizinSysteme pre-treatment of cosmeti-Z Fill refresh for subdermal cal interventions by allowinjection and Z Fill deep for ing a painless injection of BTX, Hyaluronic acid or a local anaesthetica.