



***PROPOSED TREATMENT PARAMETERS
FOR SKIN TREATMENT
with QuadroStar 980nm***

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1 *Indications:*



In general, lesions which can be malignant or are malignant should pass biopsy to identify and determine depth of invasion!

Fibroma molle (soft fibroma)

Seborrheic keratosis/warts

Actinic keratosis

Sebaceous hyperplasia

Syringoma

Molluscum contagiosum

Condyloma

Viral warts

Neurofibroma

Adenoma sebaceum (M.Pringle)

Angioma (senile, cherry)

Spider nevi

Dermal nevi

Linear epidermal nevi

Milia

Xanthelasma

Rhinophyma

Superficial basal cell carcinoma

Superficial squamos cell carcinoma

Bowen's disease

Actinic cheilitis

Chondrodermatitis nodularis (ear)

Gingival hyperplasia/tumor

Snoring

Transconjunctival blepharoplasty

2 *Exclusion criteria*

Use of Roaccutane/Accutane (for severe acne),
Use of systemic corticosteroids
Collagenosis
Non-compensated diabetes mellitus
History of keloid scarring
Pregnancy
Psychosis

Contraindications: Melanoma
Melasma

Cave! Risk!

Tanned skin – higher risk of hypopigmentation !
Kid's skin – higher risk of atrophic scars !

3 *Mode of procedure:*

- laser fiber 400µm diameter (cw, repeat, single) in contact
- Cutting mode – **shave excision** (tangential excision) of skin and mucosal lesion – surgical cutting of skin and mucosa („hot knife“)
- **Cleaning of lesion** – cauterization, coagulation, vaporization (spot by spot, point technique)
- smoke evacuator is necessary!

Most used mode: cw

3.1 CW, “Shave Excision” for skin lesions situated up to the niveau

Indications: Fibroma molle power 1-2W, cw, one treatment
Angioma pendulans power 1-2W, cw, one treatment
Dermal nevi power 2-3W, cw, one treatment
Condyloma power 2-3W, cw, one treatment

Method: laser in cw-mode, end of the fiber
tweezer, smoke evacuator,
gauze with saline,
local anesthesia (infiltration): 1% trimecain without epinefrine(adrenaline)

Precise cutting at the base of lesion, lesion stays complete, can be send for histological examination.

Very well controlled surface and depth of treatment, without papillary bleeding. Larger capillary bleeding can be immediately stopped with laser (cw 5W, in contact with vessel).

During the procedure the fiber has to be cleaned with gauze with saline to protect skin and fiber and prevents the loss of energy (otherwise with the residuals of tissue the spot may be bigger and out of focus).

- Healing:**
- first day cover with plaster,
under this antibiotic powder (neomycin-bacitracin),
 - during 10-14day crust,
 - erythema for 1-3months
 - after two months control
 - UV protection for 3 MONTHS

3.2 CW, „Cleaning of Lesion“

Indications:

- Spider nevi – power 1W, cw
start at periphery with coagulation of peripheral capillaries
- power 2-3W, cw
central bigger, deeper capillaries, two to three treatments
- Viral warts – power 2-4W, cw
one to three treatments
- Milia – power 1W, cw
one to two treatments
- Dermal nevi
Fibroma durum (hard fibroma)
Xanthelasma
Actinic keratosis
Seborrheic keratosis
Sebaceous hyperplasia
Syringoma
Neurofibroma
Angioma
Linear epidermal nevi – power 1-2W, cw
with cleaning of surface during the treatment
usually one treatment.

- Method:** end of the fibre
gauze with saline
smoke evacuator
local anesthesia (infiltration) 1% trimecain without epinefrine (adrenaline)

Lesions smaller than 2mm in diameter and superficial can be treated also without local anesthesia.

For larger problems EMLA cream can also be used (5% lidocain in cream for 30-50min in occlusion).

3.3 CW, „Hot Knife“

Indications: rhinophyma
transconjunctival blepharoplasty
snoring – power 1-4W, cw
individual due to status of treatment and skin.

Tumors
Superficial basal cell carcinoma
Superficial squamous cell carcinoma
Bowen's disease – power 2-4(?)W, cw
precise control, with safe border !!!!!

Healing:

- first three days cover with plaster, under this antibiotic powder (neomycin-bacitracin)
- during 10-21 days stays crust
- erythema for 1-3 months
- after one and two months control
- UV protection for 3 MONTHS

3.4 REPEAT MODE, „Cleaning of Lesion“

Indications are the same except viral diseases and tumors (these are better for cw mode)

Indications:

Sensitive skin (per orbital, kid's skin) for superficial benign lesions
– energy 95-110J/cm²
e.g. 20ms, 6watt, 95,6J/cm² or 30ms, 4watt, 95,5 J/cm²

Bigger, deeper lesion, normal or rough skin
– energy 150 - 200J/cm²
e.g. 50-80ms, 4watt or 34-45ms, 6watt

individual modifications are possible, changing during the treatment also.

Method: end of the fibre
gauze with saline
smoke evacuator
local anesthesia (infiltration) 1% trimecain without epinephrine (adrenaline)

Lesion smaller than 2mm in diameter and superficial can be treated also without local anesthesia. For larger problems EMLA cream can also be used (5% lidocain in cream for 30-50min in occlusion).

- Healing:**
- first day cover with plaster,
under this antibiotic powder (neomycin-bacitracin)
 - during 10-21days stays crust
 - erythema for 1-3months
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4 *ADVANTAGES*

- precise treatment of very small lesion
- very good cutting contact device
- treatment very close to eye lid or on eye lid
- minimum reflection
- stops bleeding

5 *DISADVANTAGES*

- longer healing (comparing to CO₂ laser)
- necessity of cleaning of the fiber during procedure
- „only for educated and handy doctors“ who can manage cauterization and precisely indicate

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