



JETT PLASMA LIFT MEDICAL TRAINING MATERIAL

OPHTHALMOLOGICAL INDICATIONS



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BEFORE TREATMENT

- Inform the patient about the procedure - how to take care of the treated area before and after the procedure, the process of the procedure
- Examine algae and their positions
- Inform the patient about contraindications
- Prepare the patient for treatment
 - Remove the make-up
 - Apply Benoxi gtt to both eyes
 - Perform a proper disinfection of the skin with a non-alcoholic disinfectant
 - Apply a cream containing lidocaine on eyelids in occlusion and wait for at least 20 min
 - Apply the local anesthesia with 1 ml insulin syringe to the skin according to the practice of the workplace
 - Disinfect the skin with alcohol-free disinfection
 - Cover the patient's eyeball - smoke or plasma beam could lead to corneal burns
- Set the JETT PLASMA LIFT MEDICAL device
 - Use the ophthalmology applicator with the Plasma Pen
 - Continue with standard setting and starting the device

TREATMENT

- Put on sterile gloves
- Set intensity level to 6-8 (choice of the intensity depends on the discretion of the doctor)
- Perform eyelid eversion
- Using the slit lamp, insert the ophthalmic applicator tip as far as possible into the hair duct and activate the device for 1-2 seconds to destroy the hair follicle

AFTER CARE

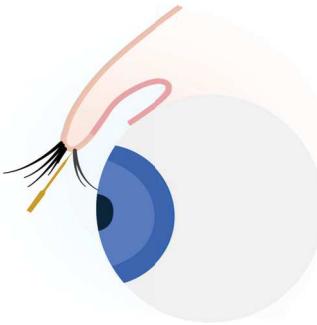
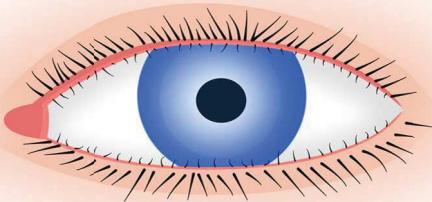
- Apply an antibiotic ointment with glucocorticosteroids
- Teach the patient to protect their eyes and surroundings from sunlight by using SPF 50+ creams and wearing sunglasses and headgear for at least 10 days

ALTERNATIVE TREATMENT METHODS

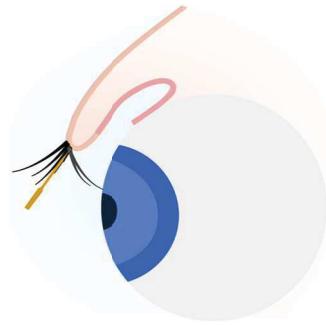
- Laser
- Radiofrequency

ATTENTION!

- The danger of causing entropion or ectropion if more algae were depilated next to each other - trat max. 5 lashes with a minimum 7 mm space in between



Distichiasis



Trichiasis

NOTES



BEFORE TREATMENT

- Inform the patient about the procedure - how to take care of the treated area before and after the procedure, the process of the procedure
- Evaluate the character of the eyelid affection
- Inform the patient about contraindications
- Prepare the patient for treatment
 - Remove the make-up
 - Perform a proper disinfection of the skin with a non-alcoholic disinfectant
 - Apply a cream containing lidocaine on eyelids in occlusion and wait for at least 20 min
 - Apply the local anesthesia with 1 ml insulin syringe to the skin according to the practice of the workplace
 - Disinfect the skin with alcohol-free disinfection
- Set the JETT PLASMA LIFT MEDICAL device
 - Use the ophthalmology or golden (14.4 / 24.4 mm) applicator with the Plasma Pen or the JETT PLASMA LIFT MEDICAL device with a golden applicator
 - Continue with standard setting and starting the device

TREATMENT

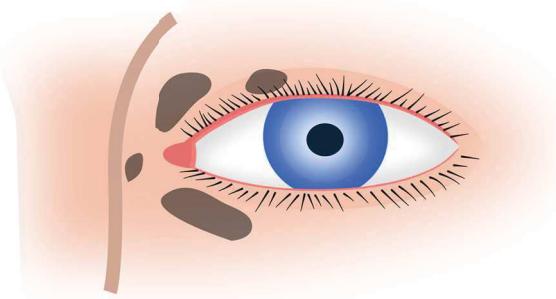
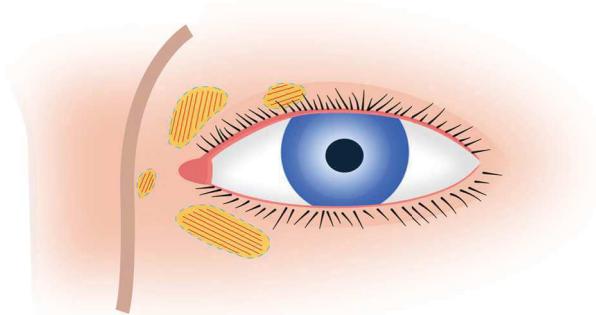
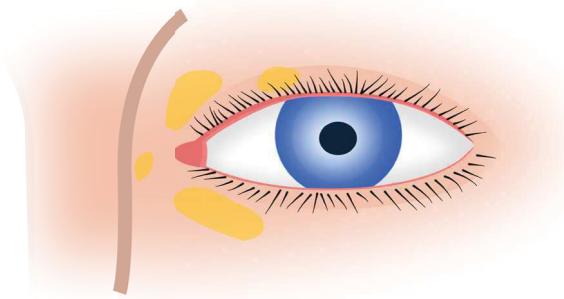
- Put on sterile gloves
- Set intensity level to 7-8 (choice of degree depends on the discretion of the doctor)
- Approach the applicator to the patient's skin and activate the device
- Move the applicator over the treated area, the yellowish deposit will gradually evaporate and coagulate until the tissue is carbonized
- While moving, hold the applicator tip at the same distance about 4 mm above the skin of the patient, so the discharge will be continuous
- Always wipe the coagulated layer with pulp with saline-free physiological or alcohol-free disinfectant solution

AFTER CARE

- Clean the treated areas with disinfectants
- Instruct the patient to:
 - Not use the corrective cosmetics for the first 4 days
 - Treat disinfected areas 2 times a day for 2-3 days
 - Apply a special regenerative gel containing hyaluronic acid after disinfection for the next 5-7 days
 - Protect their eyes and surroundings from sunlight by using SPF 50+ creams and wearing sunglasses and headgear for at least 10 days

ALTERNATIVE TREATMENT METHODS

- Laser
- Radiofrequency



NOTES



BEFORE TREATMENT

- Inform the patient about the procedure - how to take care of the treated area before and after the procedure, the process of the procedure
- Evaluate the character of malposition
- Inform the patient about contraindications
- Prepare the patient for treatment
 - Remove the make-up
 - Apply Benoxi gtt to both eyes until the patient stops feeling dripping
 - Perform a proper disinfection of the skin with a non-alcoholic disinfectant
 - Apply a cream containing lidocaine on eyelids in occlusion and wait for at least 20 min
 - Apply the local anesthesia with 1 ml insulin syringe to the skin according to the practice of the workplace
 - Disinfect the skin with alcohol-free disinfection
 - Cover the patient's eyeball - smoke or plasma beam could lead to corneal burns
- Set the JETT PLASMA LIFT MEDICAL device
 - Use the ophthalmology or golden (14.4 / 24.4 mm) applicator with the Plasma Pen or the JETT PLASMA LIFT MEDICAL device with a golden applicator
 - Continue with standard setting and starting the device

TREATMENT

- Put on sterile gloves
- Set intensity level to 8
- Approach the applicator to the patient's skin and activate the device
- Using the dot-by-dot method, treat the line externally under the eyelashes margin, then mark the triangle-shaped points down in the temporal part of the lid according to the ectropion extent up to the half of the eyelid
- Evert the lower eyelid and use the dot-by-dot method to burn the tarsal palpebral conjunctiva, i.e. from the eyelid margin to fornix
- While moving, hold the applicator tip about 4 mm above the skin of the patient, so the discharge will be continuous

AFTER CARE

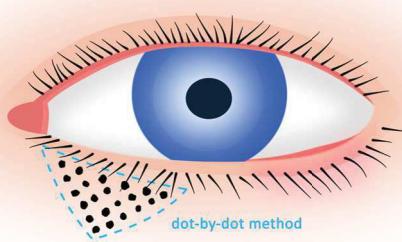
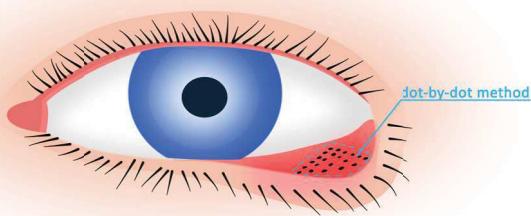
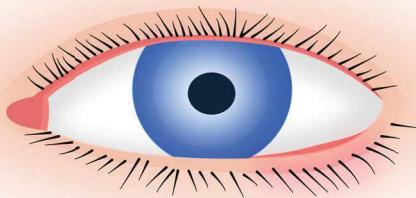
- Disinfect the conjunctival cleft and apply an antibiotic ointment with glucocorticosteroids
- Tell the patient to do the same at home for the next 7-10 days

ALTERNATIVE TREATMENT METHODS

- Laser
- Radiofrequency

ATTENTION!

- Only for lighter forms of the disease - can not be applied to heavily everted eyelids



NOTES



BEFORE TREATMENT

- Inform the patient about the procedure - how to take care of the treated area before and after the procedure, the process of the procedure
- Evaluate the character of affection
- Inform the patient about contraindications
- Prepare the patient for treatment
 - Remove the make-up
 - Perform a proper disinfection of the skin with a non-alcoholic disinfectant
 - Apply a cream containing lidocaine on eyelids in occlusion and wait for at least 20 min
 - Apply the local anesthesia with 1 ml insulin syringe to the skin according to the practice of the workplace
 - Disinfect the skin with alcohol-free disinfection
 - Cover the patient's eyeball - smoke or plasma beam could lead to corneal burns
- Set the JETT PLASMA LIFT MEDICAL device
 - Use the ophthalmology or golden (14.4 / 24.4 mm) applicator with the Plasma Pen or the JETT PLASMA LIFT MEDICAL device with a golden applicator
 - Continue with standard setting and starting the device

TREATMENT

- Put on sterile gloves
- Set intensity level to 8
- Approach the applicator to the patient's skin and activate the device
- Treat the area with the dot-by-dot method in the line below the algal margin and then mark the triangle points down from the edge of the lid
- The recommended size of the treated area is 4-5 mm from the edge of the lid in a width of 4-5 mm wide
- While moving, hold the applicator tip about 4 mm above the skin of the patient, so the discharge will be continuous

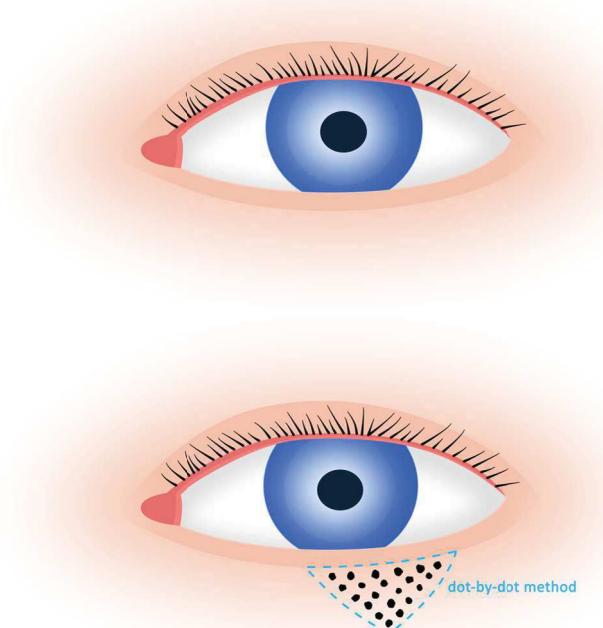
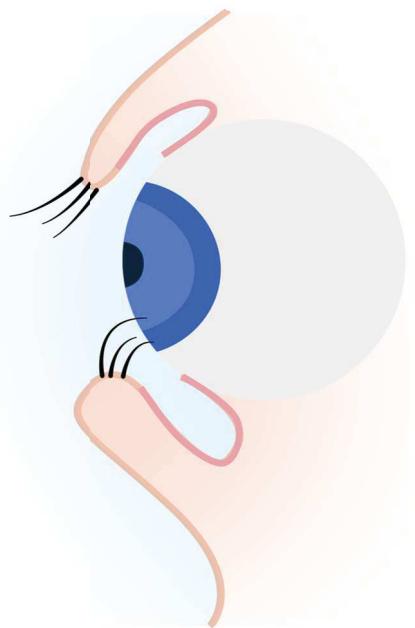
AFTER CARE

- Clean the treated areas with disinfectants
- Instruct the patient to:
 - Remove the patch in the evening
 - Not use the corrective cosmetics for the first 4 days
 - Treat disinfected areas 2 times a day for 2-3 days
 - Apply a special regenerative gel containing hyaluronic acid after disinfection for the next 5-7 days
 - Protect their eyes and surroundings from sunlight by using SPF 50+ creams and wearing sunglasses and headgear for at least 7-10 days



ALTERNATIVE TREATMENT METHODS

- Laser
- Radiofrequency



NOTES



BEFORE TREATMENT

- Inform the patient about the procedure - how to take care of the treated area before and after the procedure, the process of the procedure
- Evaluate the condition of the eyelid affection
- Inform the patient about contraindications
- Prepare the patient for treatment
 - Remove the make-up
 - Apply Benoxi gtt to both eyes
 - Perform a proper disinfection of the skin with a non-alcoholic disinfectant
 - Apply a cream containing lidocaine on eyelids in occlusion and wait for at least 20 min
 - Apply the local anesthesia with 1 ml insulin syringe to the skin according to the practice of the workplace
 - Disinfect the skin with alcohol-free disinfection
- Set the JETT PLASMA LIFT MEDICAL device
 - Use the ophthalmology applicator with the Plasma Pen
 - Continue with standard setting and starting the device

TREATMENT

- Put on sterile gloves
- Set intensity level to 5-6 (choice of degree depends on the discretion of the doctor)
- Using a surgical microscope, place the probe into the punctum lacrimalis
- Slowly circle the punctum around with the head of the applicator

AFTER CARE

- Apply an antibiotic ointment with glucocorticosteroids

CHECKUP AFTER TREATMENT

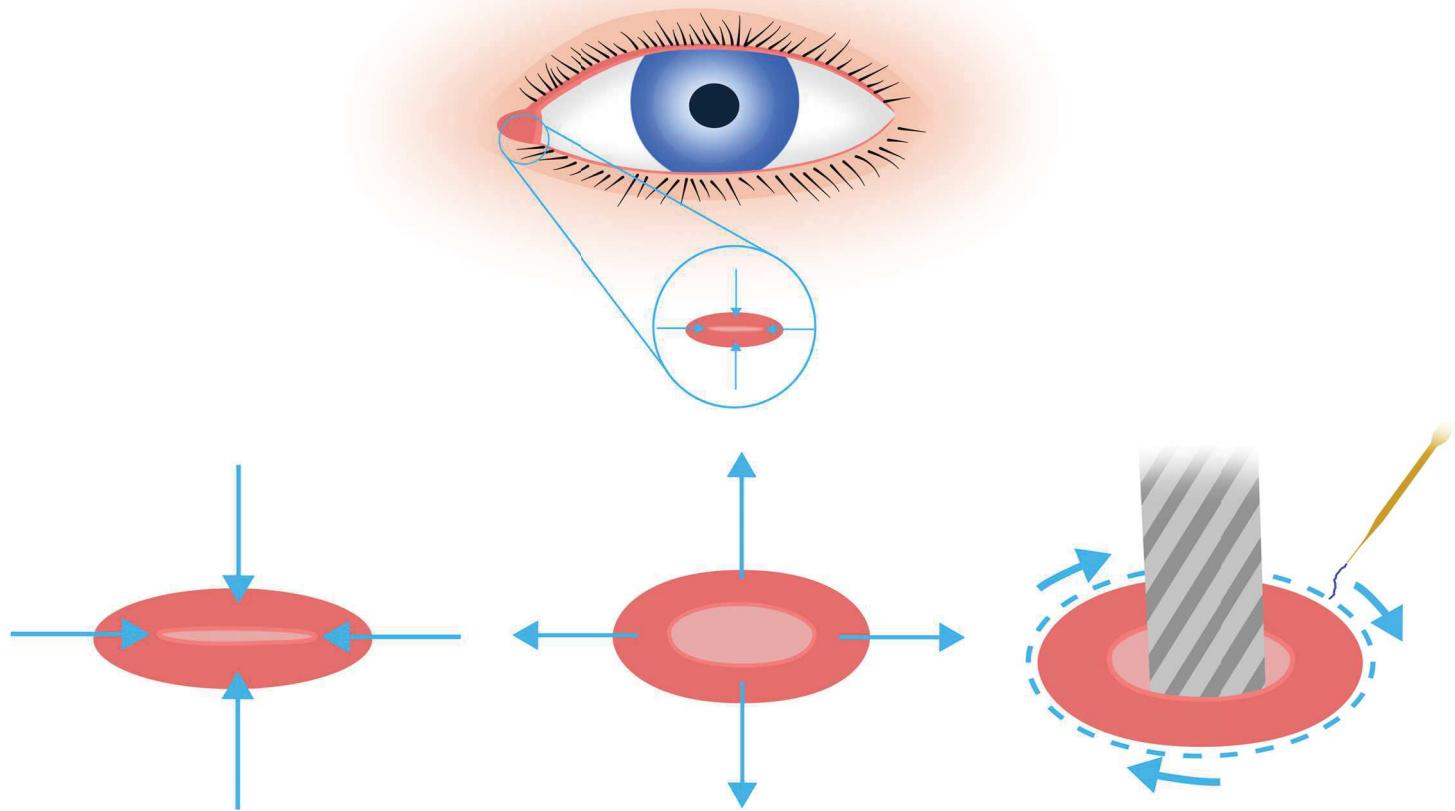
- The first checkup with the doctor is 14 days after the procedure when the patient is already objectively able to tell if there has been any improvement, deterioration, or the condition is unchanged
- 3 months after discontinuation of the treatment, a checkup has to be made to avoid recurrence

ALTERNATIVE TREATMENT METHODS

- Using a perforated point plug
- Surgical techniques requiring an incision of the punctum and plastic surgery

ATTENTION!

- Plastic zero-size probes do not have sufficient mechanical strength - use a metal probe
- The plasma discharge must not jump on the probe - keep a sufficient distance
- The part of the probe held by the doctor must be protected by a Teflon coating, or the doctor must use stronger protective gloves



NOTES



BEFORE TREATMENT

- Inform the patient about the procedure - how to take care of the treated area before and after the procedure, the process of the procedure
- Evaluate the character of the eyelid affection
- Inform the patient about contraindications
- Prepare the patient for treatment
 - Remove the make-up
 - Perform a proper disinfection of the skin with a non-alcoholic disinfectant
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 - Use the ophthalmology or golden (14.4 / 24.4 mm) applicator with the Plasma Pen or the JETT PLASMA LIFT MEDICAL device with a golden applicator
 - Continue with standard setting and starting the device

TREATMENT

- Put on sterile gloves
- Set intensity level to 5-6 (choice of degree depends on the discretion of the doctor)
- If the Meibomian glands orifices line is distinguishable, make the scan closely above and under the line of orifices, if the eyelid is scarred and the glands orifices are undistinguishable, scan the lid margin three times
- For the treatment of the upper eyelid, the patient has to have his head bent back - evert the eyelid and repeat the same procedure as with the lower lid

AFTER CARE

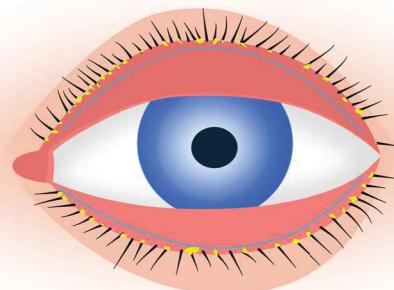
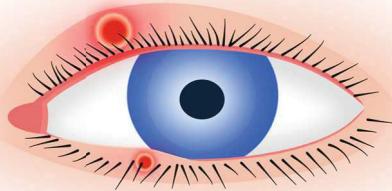
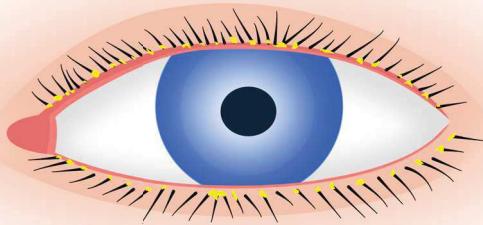
- Clean the treated areas with disinfectants
- Apply an antibiotic ointment with glucocorticosteroids
- Teach the patient about eyelid hygiene and massage of the meibomian glands
- Teach the patient to protect their eyes and surroundings from sunlight by using SPF 50+ creams and wearing sunglasses and headgear for at least 14 days

ALTERNATIVE TREATMENT METHODS

- Long-term treatment consisting of cleansing and massaging the eyelid joined with IPL treatment

ATTENTION!

- **DO NOT CREATE COAGULATION!**
- Do not use the retractor - if you use it anyway, do not touch it with the tip of the device



NOTES



TIPS

- With the dot-by-dot method, hold the activated applicator over the treated area until the color of the treated place (dot) changes - with intensity 7-8 it is 2-3 seconds
- The lower the degree of intensity you have set, the closer the tip of the applicator needs to be to the skin to activate the discharge - this causes less injury and less pain
- After 30 seconds without use, the device will go to the standby mode (the flash symbol goes out), you must press the activation button again
- If you are not sure whether the plasma discharge has occurred (for example, when setting a lower intensity), observe the head of the device to which the applicators are attached, when the plasma discharge starts, the head lights up

NOTES



NOTES



INTENSIVE PULSE LIGHT IPL

Xenon lamp generates an electromagnetic wave in broad-specter of 400-1200 nm, for safety reasons wavelengths under 400 nm are filtered out. Photons are the carriers of the energy of the electromagnetic wave. In the case of IPL treatment, large quantities of photons impact onto the tissue. Molecules of tissue cells absorb the energy of impacting photons, start vibrating and heat is produced. Intensive pulsed light is a large-area flow of photons from the IPL head with the impact surface of several square centimeters. The effect of IPL device on the tissue depends on the energy of impacting photons, duration of treatment and size of the treated area.

LASERS

They generate electromagnetic waves of a certain wavelength and work with a narrow ray. Lasers generate flows of photons of a small surface that impact the tissue and start to vibrate the cell molecules. The energy of impacting photons convert to heat. Effect on the tissue depends on laser wavelength, the energy of impacting photons, ray diameter, and duration of treatment.

RADIOFREQUENCY DEVICES

They generate an alternating flow of electrons of the frequency over 400 kHz, usually of the frequency of 2-4 MHz that is converted, when getting into contact with the tissue, to thermal energy that causes vaporization and coagulation. The effect depends on the device performance, duration of action onto the tissue and size of the treated surface.

COMPARISON OF THERMAL EFFECTS

Technologies that are used by lasers and IPL devices generate heat using the impact of photon flow on the tissue where their energy is converted to thermal effect.

Radio frequency devices generate heat using a high frequency of alternating flow of electrons when the thermal effect occurs after their impact onto the tissue.

JETT PLASMA LIFT MEDICAL uses the energy of the flow of free electrons and ions generated by direct sequential spark discharge when the thermal effect occurs once they impact onto the tissue.

In all case, the value of heat depends only on the energy of photons, or electrons and ions impacting onto the tissue, duration of treatment and the size of the treated surface.

Thus, coagulation, vaporization and/or carbonization of the tissue as required by the treatment in individual ophthalmological indications can thus be achieved by all described technologies depending on the energy, time of application and size of the treated surface.

