## KLASER

## ONYCHOMYCOSIS TREATMENT GUIDELINES

## THIS DOCUMENT IS UPDATED AS NEW TREATMENT TECHNIQUES ARE DEVELOPED

The treatment of OM is our most recent application: researchers and practitioners in various Countries are conducting studies and collaborating to optimise the procedure. If you have questions or suggestions, please contact info@klaseruk.co.uk

- 1. If the toenail is excessively thick, and the matrix appears compromised, it is NOT ELIGIBLE for laser therapy and must be removed. If the matrix is non-viable, the laser treatment will not work.
- 2. Patients can take itraconazole during the laser period.
- 3. If the nail is mildly thickened, grind it down first.
- 4. Perform 3 treatments per week for week 1, then reassess one month later (see point treatment plan below).
- 5. Preliminary treatment of the nail with the Standard Head:
- Select the Onychomycosis setting in Pododermatology click on the Therapeutic Head icon. Use the default settings, treating predominantly around the nail but also over the rest of the toe and the corresponding metatarsal area.
- Treat the nail border as well, because there could be nail fold paronychia.

6. Treatment with the High Energy Head.

- Select the Onychomycosis protocol with the High Energy Head icon.
- Try the default settings first and assess the patient's tolerance. Adapt the protocols accordingly if the treatment is perceived as too hot.
- Turn on the laser, and point it at the toenail. Ensure the red spot is FOCUSED (the smallest and most defined) by moving the head closer or further from the nail.
- Press the ON button on the maniple and keep it pressed. When you release the button, the laser beam will turn off.

- Keep moving constantly in closed PARALLEL LINES from side to side of the nail, ensure the maniple is
  constantly PERPENDICULAR to the spot you are treating: the red spot must always be ROUND (it is round
  when it is perfectly perpendicular to the treated area, maximising penetration) and NOT OVAL (it is oval
  when the maniple is NOT perpendicular: penetration is greatly reduced, the treatment is not as effective as it
  can be).
- When vapour / smoke is forming, the infected tissue has been burned and neutralised.
- Gradually increase the Power or the T-ON (Time On) until smoke forms. Monitor the patient's sensitivity.
- IF no smoke comes off the nail, it usually means the infection is too severe and it requires toenail avulsion. But if the infection is in the lower layers of the toenail, smoke may not be forming but the treatment may still be effective.
- Once you have treated the entire toenail, start over and repeat the treatment other 3-4 times, depending on the thickness of the nail, the chronicity and status of the mycosis.
- Depending on the size of the toenails, it takes between 3 and 5 minutes to complete the treatment session of a hallux, and between 30 seconds and 2 minutes for other toenails.

7) If you perform toenail avulsion, perform a Wound protocol (the appropriate size) on the toenail bed. Repeat the session with the wound protocol when you reassess the wound; if the patient is immunocompromised or is a slow healer (diabetes, smoker), perform more sessions.

8) Local anti-mycotic medication (i.e. Trosyd) is recommended in conjunction with K-Laser Therapy, but it should be applied <u>after</u> the K-Laser session, not before.

9) Assess the patient the following month and repeat the therapy if necessary, as follows:

- First week: Monday, Wednesday, Friday
- Second week: no treatment
- Third week: no treatment
- Fourth week: no treatment
- Fifth week: Monday, Wednesday, Friday
- Sixth week: no treatment
- Seventh week: no treatment
- Eighth week: no treatment
- Ninth week: Monday, Wednesday, Friday

- Tenth week: no treatment
- Eleventh week: no treatment
- Twelfth wee: no treatment
- Thirteenth week: assessment