Picoseconds Laser (Prof. Fritz - Germany)

- Shorter pulse (picoseconds) higher energy (gigawatts) to destroy pigment
- Less photothermic effect / PHOTOACUSTIC DAMAGE
- ALL SKIN TYPES (Useful for dark phototypes)
- ALL COLOURS (IN PICOSECONDS IS MORE IMPORTANT PHOTOACUSTIC EFFECT THAN CROMOPHORE).
- FRACTIONAL APPROACH (Less side effects in darker skin)
- More effective managing Melasma in darker skin (not as first line treatment, but good new option)
- PIF good results alone or combined (Tranexamic).
Challenges of laser assisted drug delivery in its clinical application (Prof. Haedersdal – Denmark)

- Do we need a laser for delivering substances? YES
- Which is better?
  1. CO2 fractional
  2. Nonablative fractional laser (1540 nm / 1550 nm)
  3. Microneedling (at distance)

Use only type and amount of drug NO HIGHER than those administered during intradermal injection.
BCC AND VASCULAR LASER (Prof. Tannous, USA)

- **PDL** 19 cases of BCC (95% 17/18 no clinical recurrence after 12 months up to 21 months), 13 cases histologic control after treatment (4 sessions every 2 weeks / 4mm margin / diverse histologic types up to 17 mm diameter)
- **Alexandrite 755 nm. Longpulse** for the reduction of tumour burden in basal cell nevus syndrome (Lasers Surg and Med, 2011). One single treatment
- **Pulse Stacking** may improve the depth of injury. 23 biopsy-proven BCCs and SCCIs. 4 to 30 mm in size. Trunk and extremities. PDL treatment. Lasers Surg and Med, 2012.
- **BCC and Nd-Yag longpulse.** 13 BCC. 4-10 mm. Different subtypes. One standard excision 1 month after one treatment. 92% no recurrence after 1 year. Ortiz, Andersson, Avram. Surg. Med. 2015 Feb 47(2): 106-110
- **CONCLUSION:** SURGERY REMAINS AS GOLD STANDARD. VASCULAR TARGETING LASERS CAN OFFER ONE ALTERNATIVE IN PRIMARY BCC IN LOW RISK AREAS (POOR SURGICAL CANDIDATES, MULTIPLE BCC TRUNK AND EXTREMITIES, GORLIN, SYNDROME).
• FUTURE DIRECTIONS FOR THE LASER AND EBD FIELD (Dr. Manstein, USA)
  • LASER AND NORMALIZATION
• A COLLECTION OF CHALLENGING CASES AND THE NEED FOR AN INTERNATIONAL REGISTRY (Dr. Wolkerstorfer, Netherlands)
  • Finding evidence non aesthetic laser indications
  • Laser treatment in Dermatology registry (LEAD)

![LEAD registry diagram]