

Drugs & Lasers/IPLs

Guidance provided by the British Medical Laser Association

Issued December 2009

Important

This advice relates to non-essential aesthetic laser applications and reflects the best data available at the time of this report. Caution should be exercised in interpretation; the results of future studies may require alteration of the recommendations in this document.

The following is a consensus opinion of interested parties from the laser and light source world in the UK and takes into account:

- a) Personal opinions
- b) Theoretical perspectives
- c) Evidence from practical use over very large numbers of clients/patients.
- d) Reporting of adverse events in clinical trials and in post marketing surveillance studies.

Background

There has been a general trend within the industry to provide end-users of laser devices with guidance on which drugs to avoid to minimise the possibility of drug induced photosensitivity reactions. This guidance has often, in the opinion of the authors, been largely based on an inappropriately rigid interpretation of what data exists.

Reports of photosensitivity reactions as a result of drug administration do occur, but we believe that these reactions have been reported to regulatory bodies with no indication of the wavelength of light that has been responsible. Accurate data are lacking generally.

Phototoxicity generally results from exposure to UVA (315-400nm) radiation with some drugs showing sensitivity into the visible region of the spectrum up to about 460nm. For laser/ipl devices emitting wavelengths above 500nm there is very little likelihood of such a reaction for the vast majority of drugs

Other drugs may have an effect on the skin's healing ability without causing photosensitivity.

Practical Advice

Information regarding all drugs a patient / client is taking should be recorded including:

- a) over the counter drugs
- b) prescribed drugs
- c) herbal remedies.

1. Photosensitising drugs that are CONTRAINDICATIONS to laser therapy.

- a. Drugs causing marked whole body sensitivity – wait 6 months

Drugs administered for systemic Photodynamic Therapy (PDT), e.g. Photofrin, Foscan.

- b. Drugs causing marked localised light sensitivity – wait 6 weeks

Drugs administered for localised PDT, e.g. ALA, Metvix.

2. Other drugs that may cause Photosensitivity

Any treatment should be performed with caution. Test carefully and treat small areas initially. If in doubt, do not treat.

If the client / patient wishes to proceed with treatment, the increased risk of hyperpigmentation / photosensitivity should be emphasised and documented.

- a. Amiodarone – risk of hyperpigmentation and photosensitivity.
- b. Minocycline (Minocin) – risk of hyperpigmentation. Recommend stopping 4 weeks prior to treatment or consider change to alternative.
- c. St John's Wort – risk of photosensitivity. Recommend stopping 4 weeks prior to treatment.
- d. If taking other medications or herbal remedies of any sort then careful initial test patch, wait 4-7 days in the case of hair removal and 4-6 weeks in the case of vascular/pigmented treatments.
- e. If client starts a BNF named photosensitiser then repeat test patch.

3. Drugs which may affect the healing of treated areas.

Any treatment should be performed with caution. Test carefully and treat small areas initially. If in doubt, do not treat.

- a. Oral Retinoids – wait 6 months after completion of the drug course

Isotretinoin (Roaccutane), acitretin (Neotigason), alitretinoin (Toctino)

- b. Topical Retinoids – stop use 2 weeks prior to laser, recommence once area is healed.

Tretinoin (Retin-A, Aknemycin Plus), isotretinoin (Isotrexin), adapalene (Differin)

- c. Oral Steroids – Wound healing impairment is dependent on potency, dose and duration of use. It is advisable to check with the prescribing physician if laser treatment can proceed safely. When possible, wait 4 weeks off drug and avoid use immediately following laser therapy. Recommence use once treated area is healed.

Betamethasone, cortisone, deflazacort, dexamethasone, hydrocortisone, methyl prednisolone, prednisolone, triamcinolone

- d. Topical Steroids – Wound healing impairment is dependent on potency, dose and duration of use. It is advisable to check with the prescribing physician if laser treatment can proceed safely. Wait 1 week prior to treatment and avoid use immediately following laser therapy. Recommence use once treated area is healed.

Disclaimer

This should not be considered as an exclusive list of drugs that may interact with the laser treatment. It does not replace any advice or instruction issued by a registered medical practitioner, pharmacist or other registered health professional. The information provided is without any implied warranty of fitness for any purpose or use whatsoever.