

LP Alexandrite laser compared to IPL for Hair Depilation

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Comparative evaluation of long pulse alexandrite laser and intense pulsed light systems for pseudofolliculitis barbae treatment with one year of follow up.

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BACKGROUND: Existing remedies for controlling pseudofolliculitis barbae (PFB) are sometimes helpful; however the positive effects are often short lived. The only definitive cure for PFB is permanent removal of the hair follicle. **AIMS:** Our aim was to compare the efficacy of the Alexandrite laser with the intense pulsed light system in the treatment of PFB and to follow up the recurrence. **METHODS:** Twenty male patients seeking laser hair removal for the treatment of PFB were enrolled in this study. One half of the face was treated with the long-pulse Alexandrite laser and the other half was treated with the IPL system randomly. The treatment outcome and any complications were observed and followed up for one year. **RESULTS:** All patients exhibited a statistically significant decrease in the numbers of papules. Our results showed that the Alexandrite-treated side needed seven sessions to reach about 80% improvement, while the IPL-treated side needed 10-12 sessions to reach about 50% improvement. During the one year follow up period, the Alexandrite-treated side showed recurrence in very minimal areas, while the IPL-treated side showed recurrence in bigger areas. **CONCLUSIONS:** Our results showed that both systems might improve PFB but Alexandrite laser was more effective at reducing PFB than IPL.

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A randomised, split-face comparison of facial hair removal with the alexandrite laser and intense pulsed light system.

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INTRODUCTION: Despite the high incidence of polycystic ovary syndrome (PCOS) in women attending for facial hair removal there are few studies looking specifically at this patient group. We carried out a split-face study directly comparing the efficacy of a 3 milliseconds pulse duration alexandrite laser with the Lumina IPL system in 38 women with PCOS. **MATERIALS AND**

METHODS: Each patient underwent six treatments using both systems, with 1, 3 and 6 months follow-up. Hair counts, hair-free intervals and patient satisfaction were recorded for all patients. **RESULTS:** After six treatments, alexandrite laser treatment resulted in longer median hair-free intervals when compared to IPL (7 weeks vs. 2 weeks; $P < 0.001$). Decrease in hair counts was significantly larger on the Alexandrite side compared to the IPL side at 1, 3 and 6 months (52%, 43% and 46% vs. 21%, 21% and 27%; $P < 0.001$). Patient satisfaction scores, using linear analogue scales (LAS), at 1, 3 and 6 months were significantly higher for the alexandrite laser than the IPL (8.7, 7.8 and 7.7 vs. 5.7, 5.1 and 5.1; $P < \text{or} = 0.002$). **CONCLUSIONS:** The alexandrite laser resulted in significantly longer hair-free intervals, a larger reduction in hair counts and greater patient satisfaction than the IPL and appeared to be more effective in this patient group. It is clear from the results in this study that the GentleLase alexandrite laser is more effective at reducing facial hirsutism in women with PCOS than the Lumina IPL. It is probable that this is due to the specific wavelength, short pulse duration and single pulse delivery of the GentleLase alexandrite laser, resulting in more follicular destruction than the IPL. (c) 2007 Wiley-Liss, Inc.

Publication Types:

[Randomized Controlled Trial](#)

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Evidence-based review of hair removal using lasers and light sources.

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BACKGROUND: Unwanted hair growth remains a therapeutic challenge and there is a considerable need for an effective and safe treatment modality.

OBJECTIVE: From an evidence-based view to summarize efficacy and adverse effects from hair removal with ruby, alexandrite, diode, and Nd:YAG lasers and intense pulsed light (IPL). **METHODS:** Original publications of controlled clinical trials were identified in Medline and the Cochrane Library. **RESULTS:** A total of 9 randomized controlled (RCTs) and 21 controlled trials (CTs) were identified. The best available evidence was found for the alexandrite (three RCTs, eight CTs) and diode (three RCTs, four CTs) lasers, followed by the ruby (two RCTs, six CTs) and Nd:YAG (two RCTs, four CTs) lasers, whereas limited evidence was available for IPL sources (one RCT, one CT). Based on the

present best available evidence we conclude that (i) epilation with lasers and light sources induces a partial short-term hair reduction up to 6 months postoperatively, (ii) efficacy is improved when repeated treatments are given, (iii) efficacy is superior to conventional treatments (shaving, wax epilation, electrolysis), (iv) evidence exists for a partial long-term hair removal efficacy beyond 6 months postoperatively after repetitive treatments with alexandrite and diode lasers and probably after treatment with ruby and Nd:YAG lasers, whereas evidence is lacking for long-term hair removal after IPL treatment, (v) today there is no evidence for a complete and persistent hair removal efficacy, (vi) the occurrence of postoperative side-effects is reported low for all the laser systems. CONCLUSION: The evidence from controlled clinical trials favours the use of lasers and light sources for removal of unwanted hair. We recommend that patients are pre-operatively informed of the expected treatment outcome.

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