【Title】

Comparison of IPL Treatment on Meibomian Gland Dysfunction with M22 and AQUA CEL

【Short Title】

Comparison of M22 and AQUA CEL

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【Purpose】To compare the efficacy of Intense Pulsed Light (IPL) therapy for meibomian gland dysfunction (MGD) with new AQUA CEL (AC, Jeisys) and traditional M22 (Lumenis).

【Methods】Fifty-nine eyes of 59 patients with MGD attending Itoh Cl (12 men and 47 women, mean age 49 ± 12 years) were enrolled in this study. They randomly received 4 sessions of IPL every 3 weeks with either M22 (29 eyes) or AC (30 eyes). Symptom score (SPEED), noninvasive breakup time (NIBUT), lid margin abnormalities, fluorescein staining, fluorescein BUT (FBUT), Schirmer's test, meiboscore and meibum grade were evaluated before and 1 month after treatment.

【Results】Before IPL, no significant differences were seen in age, gender, or measured parameters between the M22 and AC groups ($P > 0.05$, respectively). SPEED score, NIBUT, lid margin abnormalities, fluorescein staining, FBUT, and meibum grade improved significantly in both groups after IPL compared to before IPL ($P < 0.001$, respectively). There were no significant differences in measured parameters between the two groups after IPL ($P > 0.05$, respectively).

【Conclusion】Results showed equal effectiveness of IPL therapy with M22 and AC for the treatment of MGD.