

MiBoFlo - Meibomian Duct Therapy high patient satisfaction

- -11% of patients failed with restasis or LipiFlow, improved with MiBoFlo
- -TBUT improved in 96% of patients
- -93% patient satisfaction

Evaluation of Thermoelectric Warming Therapy Alone or in Combination with a New Office Lid Scrub Device for Meibomian Gland Dysfunction

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Purpose

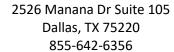
To investigate the safety and efficacy of using a new thermoelectric warming therapy alone or in combination with spinning neoprene disposable discs as lid exfoliators to treat meibomian gland dysfunction, a leading cause of dry eye.

Methods

Prospective consecutive analysis of 51 patients, 73% female, mean age 68.6 years with meibomian gland dysfunction treated at our dry eye center of excellence and research. 11% had failed restasis or lipiflow. Exclusion criteria included active ocular inflammation or autoimmune diseases. Treatment consisted of 3 sessions, two weeks apart, of localized thermoelectric warming therapy (Miboflo) for 8 minutes per eye. Patients with abnormal line of Marx and/or meibomitis also received one blepharo-exfoliation with a novel hand held device (Lidpro) prior to the Mibo treatment. OSDI and Speed questionnaires, meibography, tear osmolarity and break-up time, Shirmer test was recorded in all patients.

Results

SPEED and OSDI questionnaires improved by 88 and 40% respectively eight months after the last treatment was performed. Tear osmolarity decreased by 11% and tear break-up time improved in 96% of the patients. Ocular staining with lissamine green was significantly reduced after the first Mibo treatment and persisted 8 months after treatments. Blepharo-exfoliation treatment was required by 35 patients. In these cohort, patient satisfaction was increased to 93% and there was a significant reduction in the need of artificial tears, vasoconstrictors or cyclosporine after the treatments. No complications or adverse events occurred and all the procedures were well tolerated.





Conclusion

Statistically significant improvement in signs (tear break-up time, lissamine staining) and symptoms (OSDI and SPEED) of meibomian gland dysfunction was found after treatment with Miboflo thermoelectric warming therapy. The addition of blepharo-exfoliation when required increased patient satisfaction and decreased drop dependency after treatment.