



June 2020

Volume 61, Issue 7

< ISSUE >

OPEN ACCESS

ARVO Annual Meeting Abstract | June 2020

Mixed dry eye patients successfully treated by the innovative high-frequency electrotherapy device Rexion-Eye[®]

Alfredo Ruggeri; Eleonora Fatigati; Luca Vigo

— Author Affiliations & Notes

Alfredo Ruggeri
Resono Ophthalmic, Sandrigo, Italy

Eleonora Fatigati
Carones Vision, Milan, Italy

Luca Vigo
Carones Vision, Milan, Italy

Footnotes

Commercial Relationships **Alfredo Ruggeri**, Resono Ophthalmic (I), Resono Ophthalmic (P); **Eleonora Fatigati**, None; **Luca Vigo**, Resono Ophthalmic (C)

Support None

Investigative Ophthalmology & Visual Science June 2020, Vol.61, 114. doi:

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Abstract

Purpose : We investigated the efficacy of an innovative treatment in a small cohort of nine patients affected by mixed dry eye disease (MDED), i.e., both aqueous deficient and evaporative type. The treatment consists in the administration of a specific low-power, high-frequency electric current using the Rexion-Eye[®] device.

Methods : Nine consecutive MDED patients were recruited and all treated. Therapy was administered with the Rexion-Eye[®] device (Resono Ophthalmic, Sandrigo, Italy, patented), which applies a low-power electric current with a specific spectrum of frequencies (4-64 MHz, Quantum Molecular Resonance, QMR[®], patented). Patients were administered one 20 min treatment per week, for 4 weeks, and were examined at baseline and two month after the last treatment, by measuring: lipid layer thickness, tear meniscus, and non-invasive tear break-up time (NIBUT), all measured with IDRA (SBM Sistemi, Turin, Italy); Ocular Surface Disease Index (OSDI) score; tear osmolarity (TearLab, Escondido (CA), USA); ocular inflammation (InflammaDry; Quidel, San Diego (CA), USA).

Results : Results are reported in Table 1 and 2. The clinical endpoints improved significantly in most of the patients and no adverse events nor side effects were observed in any of them.

Conclusions : The innovative therapeutic device Rexion-Eye[®], based on the QMR[®] patented electric stimulation, proved to be very effective in improving subjective and objective ocular parameters in most of the mixed dry eye patients of this study.

This is a 2020 ARVO Annual Meeting abstract.