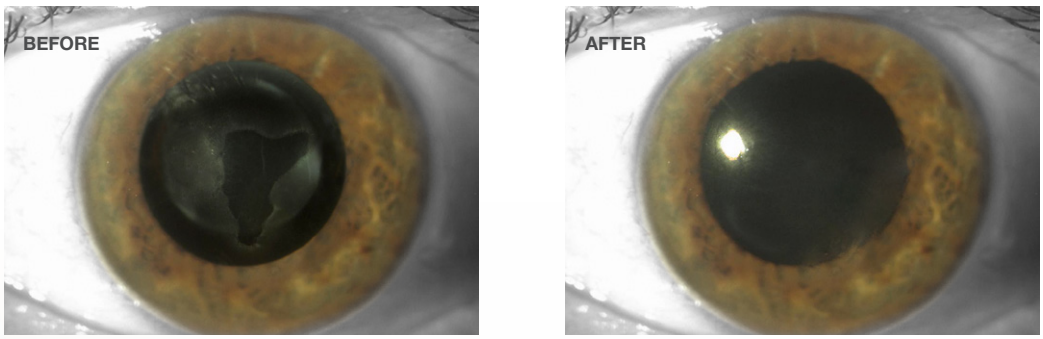
endoret® technology

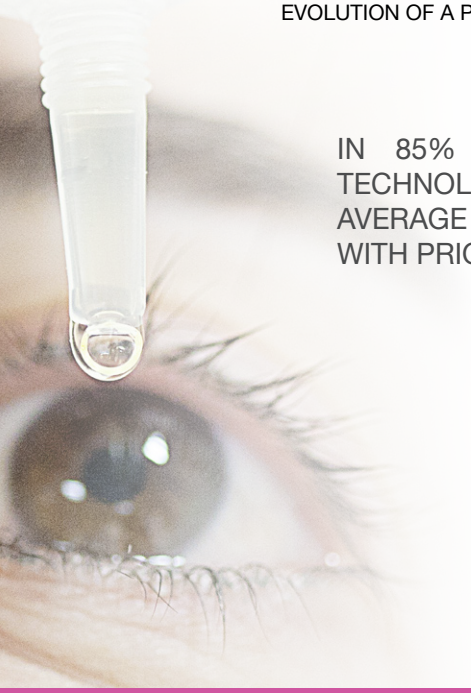
PERSISTENT EPITHELIAL DEFECTS (PEDs)

EFFECTIVENESS OF PLASMA RICH IN GROWTH FACTORS (PRGF) IN THE TREATMENT OF PERSISTENT EPITHELIAL DEFECTS

ENDORET® TECHNOLOGY IS A VERY EFFECTIVE AND PROMISING THERAPY IN THE TREATMENT OF A WIDE RANGE OF PEDs IN OPHTHALMOLOGY



EVOLUTION OF A PERSISTENT EPITHELIAL DEFECT AFTER 2 WEEKS OF TREATMENT WITH ENDORET(R) TECHNOLOGY EYE DROPS.



IN 85% OF THE PATIENTS TREATED WITH ENDORET® TECHNOLOGY, THE EPITHELIAL DEFECTS HEALED IN AN AVERAGE 10.9 WEEKS, WHEN THE AVERAGE PROGRESSION WITH PRIOR TREATMENTS WAS 26.7 WEEKS.

ENDORET® Technology eye drops are very efective in the treatment of persistent epithelial defects with different etiopathological origins.

ENDORET® Technology re-establishes the integrity of the corneal epithelium even in patients in whom prior treatment with autologous serum had not been successful.

López-Plandolit S, Morales MC, Freire V, Etxebarría J, Durán JA. Plasma rich in growth factors as a therapeutic agent for persistent corneal epithelial defects. Cornea. 2010;29:843-848.

ABSTRACT

Plasma rich in growth factors as a therapeutic agent for persistent corneal epithelial defects.

Cornea. 2010 Aug;29(8):843-8
López-Plandolit S, Morales MC, Freire V, Etxebarría J, Durán JA.

OBJECTIVE

To evaluate the efficacy of topically applied autologous plasma rich in growth factors (PRGF) as a treatment for persistent epithelial defects (PEDs) of the cornea.

METHODS

A series of prospective noncomparative cases.

PARTICIPANTS

Twenty eyes from 18 patients with PED with various underlying etiopathologies: neurogenic, iatrogenic, associated with burning or secondary to severe dry eye. Patients were treated with a PRGF eyedrop solution. Serial photographs of the cornea were taken until epithelialization was complete. We had previously characterized the levels of a panel of growth factors (platelet-derived growth factor, epithelial growth factor, vascular endothelial growth factor, hepatocyte growth factor, fibroblast growth factor, and nerve growth factor) in the PRGF of 11 of these patients. The following variables were additionally recorded: (1) duration of PED before treatment, (2) previous treatments, (3) time for complete epithelialization, and (4) treatments required concomitantly with PRGF.

RESULTS

Epithelial defects healed in 17 of 20 cases (85%), with a mean therapeutic time of 10.9 weeks (range 2-39 weeks). Mean progression time before treatment was 26.7 weeks (range 2-104 weeks). Growth factor concentrations were platelet-derived growth factor 12645.9 +/- 1690.0 pg/mL, epithelial growth factor 468.9 +/- 97.6 pg/mL, vascular endothelial growth factor 204.5 +/- 119.4 pg/mL, hepatocyte growth factor 149.5 +/- 173.5 pg/mL, fibroblast growth factor 82.6 +/- 95.9 pg/mL, and nerve growth factor 37.7 +/- 18.6 pg/mL.

CONCLUSIONS

PRGF, when applied as eyedrops, is a highly effective therapeutic agent for the treatment of a broad etiopathological spectrum of corneal PEDs.

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Scientific Information on unapproved use of approved medical product communications: ENDORET® technology has not been approved by FDA for use in persistent epithelial defects (PEDs), and the safety and effectiveness of ENDORET® technology for PEDs has not been established. ENDORET® technology has only been approved by FDA (510(k) number: BK130049 and BK150294) to be used for the preparation of autologous platelet rich plasma from a small sample of peripheral blood for mixing with bone graft to improve handling characteristics.