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Age-Dependent Effects of Hormone Replacement Therapy on Dry Eye Syndrome

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Description

At least a year after experiencing natural menopause, eighty-eight women were randomly assigned to either the HRT (Hormone Replacement Therapy) group, which received oral estrogen and medroxyprogesterone acetate, or the control group, which did not receive any medication. The schirmer test and Tear Film Break Up Time (TBUT) were used to measure the aqueous tear production and tear quality both before and after a month of treatment. Age-based categories were used to separate the subjects: The HRT group was split into groups A (ages 44-49) and B (ages 50-57), while the control group was split into groups C (ages 46-49) and D (ages 50-55). Within each group, the schirmer test and TBUT results were compared before and after therapy and the age of the participants was linked to these changes. The Schirmer test was enhanced by HRT use after a month of follow-up, however the impact was only meaningful for those under 50. Following HRT treatment, there was no visible difference in the TBUT within each group. Age determines the effect of HRT on tear production, which may increase aqueous tear production but not the quality of tears in DES. A multifactorial condition affecting the tears and ocular surface, Dry Eye Syndrome (DES) causes discomfort, visual impairment and instability of the tear film, along with possible ocular surface injury. Ocular inflammation and elevated tear film osmolarity are associated with DES.

Dry eye syndrome

The discomfort brought on by the illness is frequently not entirely alleviated by the treatment. This is due to the fact that while these treatments reduce the symptoms of DES, they do not address the disease's fundamental pathophysiological process, which is the imbalance between evaporation and the formation of aqueous tears. DES is far more common in women and one risk factor for the disorder is being older. Indicating that hormones may be important in the onset and progression of DES, particularly in postmenopausal women. Hormone Replacement Therapy (HRT) has been proposed as a means of easing symptoms and enhancing tear and ocular surface functioning in DES patients. On the other hand, there have also been reports of opposite outcomes. Women on HRT with estrogen and medroxyprogesterone acetate may be more susceptible to developing DES. These contradictory findings could be explained by the fact that the effectiveness of HRT is dependent on the age of the patients at the start of treatment and the amount of estrogen taken. Only younger women may benefit from estrogen, whereas older women may experience negative side effects and/or inflammation. It is unclear how DES, HRT and age relate to one another. The goal of the current study was to clarify how HRT affected the age-related tear function of DES patients. One of the main causes of blindness in young adults is Optic Neuropathy (ON), an inflammatory condition of the optic nerve that can also be the initial sign of recurring central nervous system disorders like multiple sclerosis. The goal of ON treatment research is to lessen young individuals' visual impairment.

Treatment duration

The first-line treatment for ON during its acute phase is corticosteroids. When compared to oral 1 mg/kg dose, patients treated with Intravenous Methylprednisolone (IVMP) 1 g/day had a faster and wider visual recovery. The length of IVMP pulse therapy ranged from three to seven days, according to a comprehensive evaluation of the literature. Therefore, in clinical practice, 1 g/day of IVMP is advised for 3-7 days. The best intravenous methylprednisolone schedule is uncertain, though, as is the impact of a five and seven-day intravenous methyl-prednisolone plan on visual recovery for ON therapy. The undertreating patients with shorter regimens because the seven-day period is superior. However, if a seven-day schedule is comparable to a five-day plan, then facilities that employ longer schedules might be raising hospital stay length and expenses without providing any clinical advantages. Participants required to meet the MDS criteria and have a high percentage of banked DNA or bone marrow from the diagnosis. Retrospective analysis of medical records was done to look at patient demographics and results. Additionally, cytogenetic results were documented. After that, these products were sequenced using an Applied Biosystems electrophoresis device. Using gene annotations from GenBank and the mutation surveyor program from Soft Genetics, Inc., sequence chromatograms were analyzed for mutations that were expected to cause loss of function.

References

1. Kuo KT, Chang HC, Hsiao CH, Lin MC (2006) Increased Ki-67 proliferative index and absence of P16INK4 in CIN-HPV related

pathogenic pathways different from cervical squamous intraepithelial lesion. Br J Ophthalmol 90: 894-899.

2. Chronopoulos A, Fallico M, Poulson AV, Snead MP (2018) A simple, inexpensive lasso for intraocular foreign body extraction. Retina 38: 862-864.
3. Francis AW, Wu F, Zhu I, de Souza Pereira D, Bhisitkul RB (2019) Glass intraocular foreign body removal with a nitinol stone basket. Am J Ophthalmol Case Rep 16: 100541.
4. Shah CM, Gentile RC, Mehta MC (2016) Perfluorocarbon liquids' ability to protect the macula from intraocular dropping of metallic foreign bodies: A model eye study. Retina 36: 1285-1291.
5. Woodcock MG, Scott RA, Huntbach J, Kirkby GR (2006) Mass and shape as factors in intraocular foreign body injuries. Ophthalmology 113: 2262-2269.
6. Ehlers JP, Kunimoto DY, Ittoop S, Maguire JI, Ho AC, et al. (2008) Metallic intraocular foreign bodies: Characteristics, interventions, and prognostic factors for visual outcome and globe survival. Am J Ophthalmol 146: 427-433.
7. Lieb DF, Scott IU, Flynn HW, Miller D, Feuer WJ (2003) Open globe injuries with positive intraocular cultures: Factors influencing final visual acuity outcomes. Ophthalmology 110: 1560-1566.
8. Choudhari KA, Pherwani AA (2007) Sudden visual loss due to posterior ischemic optic neuropathy following craniotomy for a ruptured intracranial aneurysm. Neurol India 55: 163-165.
9. Gaillard MC, Zambaz BD, Borruat FX (2004) Posterior ischemic optic neuropathy: Case report of a rare complication after general surgery. Klin Monbl Augenheilkd 221: 421-423.
10. Foroozan R, Buono LM, Savino PJ (2003) Optic disc structure and shock-induced anterior ischemic optic neuropathy. Ophthalmology 110: 327-331.