

COMPARATIVE STUDY BETWEEN THREE MODALITIES OF TREATMENT OF DRY EYE SYNDROME

Thesis

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List of Abbreviations

®.....	Registered mark .
µm ²	Square micrometer .
4HPF.....	Four high power fields .
ANA.....	Antinuclear antibody .
ANCA.....	Antinuclear cytoplasmic antibody .
ANOVA.....	One way analysis of variance .
ATD.....	Aqueous tear deficiency dry eye .
BSLPD.....	Boston sclera lens prosthetic device .
DES.....	Dry eye syndrome .
DEWS.....	Dry eye work shop .
E.I.P.I.Co.....	Egyptian international pharmaceutical industries company .
EGF.....	Epithelial growth factor .
ELISA.....	Enzyme linked immunosorbent assay .
FAs.....	Fatty acids .
FDA.....	Food and drug administration .
GCD.....	Goblet cell density .
HBV.....	Hepatitis B virus .

HCV.....	Hepatitis C virus .
HIV.....	Human immune deficiency virus .
HS.....	Statistically highly significant .
IgA.....	Immunoglobulin A .
IOP.....	Intra ocular pressure .
KCS.....	Keratoconjunctivitis sicca .
LASIK.....	Laser in situ keratomelusis .
LIPCOF.....	Lid parallel conjunctival folds .
LM.....	Light microscope .
MGD.....	Meibomian gland disease .
mOsm/L.....	Milli osmol per litre .
N/C.....	Nuclear cytoplasmic ratio .
NS.....	Statistically non significant .
NSAIDS.....	Non steroidal anti inflammatory drugs .
NSTD.....	Non-Sjögren's tear deficiency .
<i>P</i>	Probability .
PAS.....	Periodic acid Schiff .
PMMA.....	Polymethylmethacrylate .
PUFA.....	Polyunsaturated fatty acids .

RF.....	Rheumatoid factor .
rpm.....	Revolution per minute .
SCL.....	Soft contact lens .
SD.....	Standard deviation .
SPSS.....	Statistical programme for social science .
SS.....	Sjögren's syndrome .
SS.....	Statistically significant .
SSTD.....	Sjögren's syndrome tear deficiency .
TBUT.....	Tear break up time test .
TCR.....	Tear clearance rate .
TFL.....	Tear function index .
TGFB.....	Transforming growth factor beta .

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Introduction

Dry eye syndrome (DES) is a common disorder of the tear film which is characterized by a deficiency in the quantity and /or quality of tears , an unstable tear film , ocular surface damage and bothersome symptoms such as ocular irritation , dryness , fatigue and fluctuating visual disturbances (*Novic et al , 2007*) .

The current understanding of the pathogenesis of DES has proceeded from the mere recognition of a lack of , or altered quality of tears to recognition of inflammation as the key pathogenic mechanism (*Elmer and Reinstorm , 2004*) .

Dry eye disease , a chronic inflammatory condition that may be mediated by activated T- cell lymphocytes , affects the ocular surface and lacrimal glands . The damage caused by dry eye disease may be irreversible , and despite the availability of various tear substitutes , many patients with dry eye syndrome can experience corneal pathology with a subsequent reduction in vision (*Schechter , 2006*) .

Many years ago , the traditional approach to treating dry eye has been to lubricate the ocular surface by either replacing or conserving the patient's tears using artificial tears drops (*Hong et al , 2007*) .

Since then , significant advances have been made in treating many facets of dry eye including :