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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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LIMBAL STEM CELL TRANSPLANTATION IN THE MANAGEMENT OF OCULAR SURFACE DISORDERS

ESSAY

Submitted for partial fulfilment of the M.Sc. degree in
Ophthalmology

By

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Abstract

The ocular surface describes the entire epithelial surface of the external eye including the corneal, conjunctival and limbal epithelia as well as the precocular tear film. The stem cells are the provider for the regeneration of the corneal epithelium. The management of ocular surface disorders using limbal stem cell transplantation has benefited from major breakthroughs in recent years. Understanding the role of limbal stem cells have led to great improvements in both visual acuity and quality of life for these patients through different surgical techniques.

Key words:

Limbal stem cell- Ocular surface disorders- Stem cell Transplantation- Limbus.

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Abbreviations

BMZ	: Basement membrane zone
c-CLAL	: Cadaveric conjunctival limbal allograft
C-KLAL	: Cadaveric keratolimbal allograft
CLAU	: Conjunctival limbal autograft
CsA	: Cyclosporine A
DNA	: Deoxyribonucleic acid
DPBS-CMF	: Dulbecco's Phosphate Buffered Saline-Calcium Magnesium Free
ECCE	: Extracapsular cataract extraction
EGF	: Epithelial growth factor
EVELAU	: Ex vivo expanded limbal autograft
GM	: Growth medium
HAM	: Human amniotic membrane
HLA	: Human leukocyte antigen
HPCLK	: Homologous penetrating central limbkeratoplasty
ICCE	: Intracapsular cataract extraction
KEP	: Keratoepithelioplasty
KLAL	: Keratolimbal allograft
lr-CLAL	: Living-relative conjunctival limbal allograft
lr-EVELAL	: Living-relative ex vivo expanded limbal allograft

LSCD	: <i>Limbal stem cell deficiency</i>
OCP	: <i>Ocular cicatricial pemphigoid</i>
OSD	: <i>Ocular surface disease</i>
PAS	: <i>Paraminosalicylic acid</i>
PMC	: <i>Post mitotic cells</i>
PMNs	: <i>Polymorphonuclear leukocytes</i>
PK	: <i>Penetrating keratoplasty</i>
SC	: <i>Stem cells</i>
SEM	: <i>Scanning electron microscopy</i>
SJS	: <i>Stevens-Johnson syndrome</i>
SSCE	: <i>Sequential sectoral conjunctival epitheliectomy</i>
TAC	: <i>Transient amplifying cells</i>
TDC	: <i>Terminally differentiated cells</i>
TGF	: <i>Transforming growth factor</i>
UV	: <i>Ultraviolet</i>

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