Name : Nancy Maher Ahmed Lotfy

Faculty : Medicine

Dept. : Ophthalmology

Degree : Ph.D.

Title of Thesis: Transplantation of Ex-Vivo Expanded Epithelial Stem Cells in Limbal Stem Cell Deficiency (Laboratory/Clinical Prospective Interventional Non-Controlled Nonrandomized Study)

Supervisors : Dr. Samia Mamdouh Sabry, Dr. Hazem Mahmoud Ali Atta and Dr. Sherif Ali Gamal El-Din

Abstract:

Limbal stem-cell deficiency can be congenital or acquired; it can also be partial or total. Treatment options include: conjunctival-limbal autografts, keratolimbal lamellar allograft, and living-related conjunctival-limbal allografts. A novel method of transplanting limbal stem cells is via ex-vivo expansion of limbal stem cells; with the advantages of: a smaller limbal biopsy, reduced risk of precipitating stem cell failure in the donor eye, and allowing the option of taking a further biopsy if required.

Keywords: Cornea; Limbal; Stem cell; Ex-vivo expansion.