

LIST OF TABLES

Table		Page
1.	The trial lenses parameters.	41
2.	Age distribution in the two groups.	43
3.	LogMAR visual acuities in the studied groups.	43
4.	Visual acuity in the nipple cone group.	44
5.	Visual acuity in the oval cone group.	45
6.	Keratometry readings in the studied groups.	46
7.	Distribution of the studied groups according to refractive and topographic astigmatism.	46
8.	Cone types and their severity according to the mean K.	47
9.	Cone peak diameter and over all cone diameter in the studied groups.	47
10.	The correlation between K2 readings and the cone diameters.	48
11.	The base curve, BOZD, Lens diameter in the studied groups.	49
12.	Fitting of eyes according to flat K in the studied groups.	50
13.	The correlation between base curve and the cone diameters in both groups.	50
14.	Correlation between BOZD with Cone peak and overall cone diameters in each group.	52
15.	Correlation between lens diameter with Cone peak and Overall cone diameter in each group.	53

LIST OF FIGURES

<i>Figure</i>	<i>Page</i>
(1) Signs of keratoconus	4
(2) Rigid contact lens terminology	12
(3) Corneal neovascularization due to lens wear	16
(4) Apical clearance method of fitting	22
(5) Apical bearing method of fitting	24
(6) Corneal abrasions	24
(7) Three point touch.	25
(8) Piggyback contact lens fitting	26
(9) Hybrid contact lens on the eye	27
(10) (A) Diagram of posterior curves in mcguire system. (B) mcguire lens	27
(11) The Allegro topolyzer	36
(12) Nipple cone	37
(13) Oval cone	38
(14) The screen caliper	38
(15) Measurement of cone peak diameter	39
(16) Measurement of overall peak diameter	39
(17) Fluorescein pattern with 3 point touch	40
(18) Correlation between K2 with overall cone diameter in the oval group	48
(19) Correlation between BC and cone peak diameter in nipple group	51
(20) Correlation between BC and overall cone diameter in oval group	51
(21) Correlation between BOZD and cone peak diameter in the nipple group	52
(22) Correlation between BOZD with overall cone diameter in the oval group	53
(23) Correlation between overall lens diameter with cone peak diameter in nipple group distance	54
(24) Correlation between overall lens diameter with overall cone diameter in oval group	54

LIST OF ABBREVIATIONS

BC	: Base curve
BCR	: base curve radius
BSCVA	: Best spectacle corrected visual acuity
CL	: contact lens
CLEK	: Collaborative Longitudinal Evaluation of Keratoconus
CVK	: Computerized videokeratography
CXL	: Collagen cross-linking
FDA	: Food and drug administration
GPC	: Giant Papillary Conjunctivitis
IL-1	: Interleukin -1
K1	: Flattest K
K2	: Steepest K
LASIK	: Laser in-situ keratomileusis
LD	: Lens diameter
BOZD	: Back optic zone diameter
LogMAR	: the Logarithm of the Minimum Angle of Resolution
OSU	: The Ohio State University
OZD	: Optic zone diameter
PCCR	: Posterior central curve radius
PCW	: Peripheral curve width
PK	: penetrating keratoplasty
PMMA	: polymethylmethacrylate
RGP	: rigid gas permeable
UCVA	: Uncorrected visual acuity
UVA	: ultraviolet A
VA	: Visual acuity