Tear quantity in thyroid dysfunction

كمية الدموع لدى الأشخاص المصابين بخلل في وظائف الغدة الدرقية

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Abstract

Aim: To measure the tear volume in thyroid dysfunction patients and to estimate the vision and outer eye.

Material and Methods: This is a cross sectional hospital based study, it was done at Omdurman military hospital and Al Ribat University hospital from June to October 2016. One hundred and thirty patients with thyroid dysfunction (80 hyperthyroidism and 50 hypothyroidism) were included in this study. The vision was estimated by Snellen’s chart, outer eye was investigated by torch and hand held magnifier and Schirmer paper test was used to asses tear quantity.

Results: Eighty four percent of hyperthyroidism and 88.75% of hypothyroidism were females. Hyperthyroidism patients represent 61.54%; 20% of them showed exophthalmos, vision mean was 0.84±0.25 (range 0.1-1.00). The patients with hypothyroidism (38.46%) had slightly better vision with mean 0.92±0.19 and range 0.1-1.00. Tear quantity was more reduced in hyperthyroidisms patients (mean 10.8±5.8 and range: 3-35mm) than in hypothyroidisms (mean 12.8±6.7mm and range: 4-35mm).

Conclusion: Regular ocular examination is recommended for patients with thyroid dysfunction to save their eyes.

Key words: Thyroid dysfunction, Hyperthyroidism, Hypothyroidism, Tear quantity
The Effect of Cosmetic Contact Lenses on Visual Functions

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ABSTRACT

Aim: To evaluate the effect of cosmetic contact lenses (CCL) on visual functions.

Material and Methods: This is experimental hospital based study conducted in Faculty of Optometry and Visual Sciences; during the period between March to July 2017. A total of 152 of females were enrolled in this study and they are relatively normal. Their ages ranged between 18 to 30 with a mean of 22.7±4.01 years. Pelli–Robson contrast sensitivity chart, Farnsworth–Munsell D–15 test, Tetmus fly test and Snellen’s chart test were used in this study to evaluate contrast sensitivity, color vision, stereopsis and visual acuities respectively. The collected data was analyzed using statistical packages for social sciences SPSS 20 (IBM).

Result: Each of the subjects was fitted with 7 different colours CCL; all subjects have normal vision in both eyes (6/5), normal stereopsis and colour vision (CV) before and after wearing CCL. In term of visual acuity there was a reduction after wearing CCL in (135) 88.8% of the both eyes a significant difference found in the 6 colours P 0.000; expect the blue colour P > 0.05. Contrast sensitivity (CS) in all participant was in normal range 1.5–1.85 with a mean of 1.60±0.07 before wearing CCL then after wearing CCL all of