

Refractive changes after scleral buckling surgery in patients with rhegmatogenous retinal detachment

Isra Batool, Abdullah Naeem Syed, Haleema Masud

Abstract

Objective: This study was aimed to determine refractive changes in patients who underwent scleral buckling surgery attending the retina clinics of Al- Shifa Trust Eye Hospital, Rawalpindi.

Study Design: Prospective follow-up study

Subjects and Methods: 49 patients (50 eyes) with retinal detachment that who were attending the Retina department of Al Shifa Trust Eye Hospital were included in this study by convenient sampling. The study was carried out from September 2014 to March 2015. Pre-operative assessment was performed which included measurement of visual acuity with and without glasses, refraction to determine best corrected visual acuity, measurement of K-readings by a Javal Shiotz keratometer, axial length by A-Scan ultrasonography and intra-ocular pressure by a tonopen. Surgery either consisted of encircling scleral buckling or buckling with vitrectomy depending on the grade of proliferative vitreo-retinopathy. The clinical examinations were repeated after 1 week and 1 month of surgery to look for any changes. The data was analyzed using one-way repeated measures ANOVA in SPSS.

Results: Refractive changes including myopic and hypermetropic shift was observed in patients due to increase in corneal curvatures and axial lengthening or shortening after surgery. The intra-ocular pressure also increased in most of the patients following both types of surgeries.

Conclusion: Refractive changes occurred in patients following scleral buckling surgery.

Al-Shifa Journal of Ophthalmology 2015; 11(2): 82-89. © Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.
