Diplopia After Refractive Surgery: New Issues, Old Solutions.

Chiariello Vecchio E1, Carelli R.1, Plaitano C.1, Forte R.1, Magli A.1

1Department of Medicine, University of Salerno, Baronissi (SA), Italy

To describe features and surgical management in patients that developed persistent diplopia manifesting after refractive surgery for hyperopia, myopia, anisomyopia, astigmatism and monovision, to describe the different causes and how to avoid this complication.

A retrospective study of patients who presented with binocular decompensation after refractive surgery. Mean age at surgery was 38.5 SD 10.26 (range 22-54) years.

A total of 10 patients (6 females, 4 males) were identified and met the inclusion criteria. The causes of post-operative diplopia included technical problems, aniseikonia, iatrogenic monovision, prior need of prisms, and improper control of accommodation in patients with strabismus. Screening techniques before refractive surgery are strongly suggested to identify all patients at high risk for post-operative diplopia with the exception of those in whom technical problems were responsible.

Refractive surgery is becoming increasingly popular with patients who seek an alternative to wearing spectacles. However, double vision can become manifest after refractive surgery. With risk stratification and recommended screening criteria, the incidence of these complications can be minimized.