A survey of the management of vitreoretinal pathology detected prior to laser-assisted *in situ* keratomileusis

Dear Sir,

The most common indication for laser-assisted *in situ* keratomileusis (LASIK) is correction of myopia.^[1]

LASIK can induce the development of posterior vitreous detachment, and vitreoretinal (VR) complications have been described after LASIK.^[2,3]

Myopia is itself associated with VR complications.[4]

These are usually referred to VR surgeons for management.

We conducted a national survey of the British and Eire Association of Vitreoretinal Surgeons (BEAVRS) to determine the preferred practice patterns among VR surgeons for the management of VR pathology in myopes, detected prior to patients undergoing LASIK.

A questionnaire was sent electronically to the membership database of BEAVRS. BEAVRS is a national society of VR surgeons whose members practice in the United Kingdom and Ireland.

Forty surgeons responded. All respondents have experienced consultant VR surgeons. Over a period of 1 year, 73% of respondents saw between 1 and 5 patients referred after a consultation for LASIK.

For the patients referred, the respondents reported findings on a total of 106 patients. The average myopia was -5.75 D (-2.5 D to -11.75 D).

The following VR pathology was detected in one or both eyes:

- Sixty-three percent of eyes had an asymptomatic hole or break
- Fourteen percent had a symptomatic hole or break
- Seventy-nine percent had lattice degeneration
- Seven percent were referred with a retinal detachment.

The survey did not seek to quantify the extent of retinal detachment, but all detachments were asymptomatic.

Seventy-eight percent of the VR surgeons surveyed would treat VR pathology based on retinal findings only, and not because the patient was about to have LASIK. However, 13% said they would consider the fact that the patient was about to undergo LASIK as a factor in influencing their decision to treat.

Opinion was equally divided whether all patients with pre-LASIK retinal pathology should be referred for VR opinion or whether a referral should be at the discretion of the corneal surgeon.

Thirty-five percent felt all detected retinal pathology before LASIK should have a VR opinion, 33% disagreed and felt that referral should be at the discretion of the corneal surgeon; and the remainder were undecided.

Ninety-three percent of respondents were not aware of any treatment guidelines for treatment of retinal pathology in patients having LASIK. The incidence of VR complications after LASIK is very low. Various large studies have not shown an increased incidence of retinal tears or detachment after LASIK, with the reported incidence of VR pathology being 0.05–0.06%.^[1,3]

In addition, there is no clear published data to suggest a cause and effect association for an increased incidence of VR pathology post-LASIK.^[1,3]

Based on the current medical literature, there is insufficient evidence to determine whether retinal lesions in myopes about to have LASIK should be treated differently from standard practice.

The survey results are consistent with this as 78% of respondents would manage in a standard fashion. We are not aware of any specific guidelines for management of pre-LASIK VR pathology.

Financial support and sponsorship Nil

Conflicts of interest

There are no conflicts of interest.

Anil J Singh

Department of Ophthalmology, Lister Hospital, Coreys Mill Lane, Stevenage, Hertfordshire, SG1 4AB, United Kingdom

Correspondence to: Dr. Anil J Singh,

Department of Ophthalmology, Lister Hospital, Coreys Mill Lane, Stevenage, Hertfordshire, SG1 4AB, United Kingdom. E-mail: mraniljsingh@yahoo.co.uk

References

- Arevalo JF, Lasave AF, Torres F, Suarez E. Rhegmatogenous retinal detachment after LASIK for myopia of up to -10 diopters: 10 years of follow-up. Graefes Arch Clin Exp Ophthalmol 2012;250:963-70.
- 2. Gavrilov JC, Gaujoux T, Sellam M, Laroche L, Borderie V. Occurrence of posterior vitreous detachment after femtosecond laser *in situ* keratomileusis: Ultrasound evaluation. J Cataract Refract Surg 2011;37:1300-4.
- Arevalo JF. Posterior segment complications after laser-assisted in situ keratomileusis. Curr Opin Ophthalmol 2008;19:177-84.
- Wilkinson CP. Evidence-based analysis of prophylactic treatment of asymptomatic retinal breaks and lattice degeneration. Ophthalmology 2000;107:12-5.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

| Access this article online | |
|----------------------------|----------------------------------|
| Quick Response Code: | Website: |
| 回的報酬回 | www.ijo.in |
| | DOI: 10.4103/0301-4738.171980 |

Cite this article as: Singh AJ. A survey of the management of vitreoretinal pathology detected prior to laser-assisted *in situ* keratomileusis. Indian J Ophthalmol 2015;63:874.