Planning a new intraocular lens library in the Indian scenario

Sir,

Cataract is the most common cause of avoidable blindness in India.[1-3] Implantation of an intraocular lens (IOL) has become a standard care and the National Health-care Policy of India has set the norms of 95% surgeries to have IOL implantation by 2020.[4] It is essential for the new institutes aiming for high-volume surgeries to have an IOL library.[5] We evaluated the ocular biometry of patients undergoing cataract surgery retrospectively to identify the requisite IOL powers as no such Indian database is available.

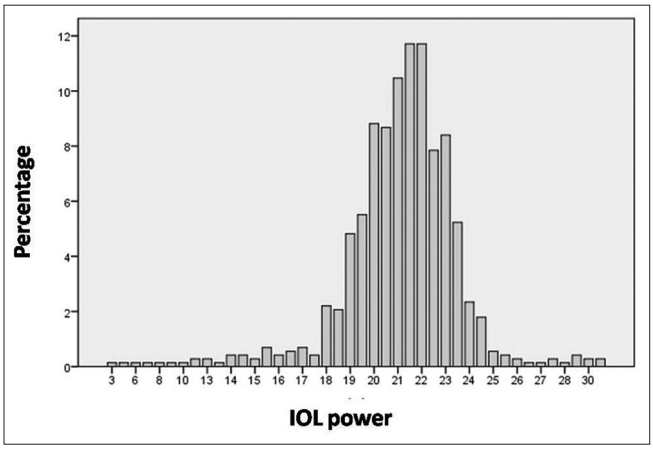

Figure 1: Histogram depicting percentages of different intraocular lens powers required in Indian patients undergoing cataract surgery

Patients of age more than 40 years with no other ocular history were included. Axial length (AL) in millimeters and keratometry (K) in diopters were measured using a single optical biometer. IOL power was calculated with the biometer using modified SRK-2 formula for the most minimal myopic refractive error possible. The A-constant was set at 118.7 for these calculations, while surgeon factor was set as ± 0.5 D.

Totally 850 eyes were included in the analysis. Mean age of the patients was 60.25 ± 9.10 years (range:- 40–83 years), while 606 were males (71%). Mean AL and keratometry were 23.23 ± 1.18 mm and 44.11 ± 1.86 D, respectively. The mean IOL power was measured as 21.08 ± 7.36 D (3–31). The distribution of the IOL powers is presented in Fig. 1. Our results show that the most commonly required IOL powers (90% cases) in the Indian setting are in the range of 18 D–24.5 D. Further, nearly two-thirds of them range between 19 D and 23 D. It should be noted here the IOL powers in this study have been calculated using a single A-constant, and minor variations can thus be expected. The results of our study will be helpful toward setting up of IOL libraries in new Indian facilities.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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Access this article online

Quick Response Code:

Website: www.ijo.in

DOI: 10.4103/ijo.IJO_634_18

Cite this article as: Saluja G, Takkar B, Agarwal E, Sharma B, Khokhar S. Planning a new intraocular lens library in the Indian scenario. Indian J Ophthalmol 2018;66:1227-8.