

**Introduction:** The vertical dimension of the palpebral fissure and the marginal reflex distance are conventionally used to assess the amount or degree of blepharoptosis, and levator function is assessed by measuring total upper lid excursion between the extremes of down-gaze and up-gaze. However, these are one-dimensional measures obtained with a ruler, and the results obtained are dependent on examiner skill.

**Methods:** Digital photographs were obtained of 692 patients before and after upper blepharoplasty. Visual iris-pupil complex percentage (VIP) was measured in the 1384 eyes by digital calculation using Adobe Photoshop CS3 (Adobe Systems, Inc., San Jose, Calif.). Perioperative eye images in primary gaze were evaluated independently by two surgeons, two nurses, and a graphic designer, and after excluding 50 eyes (25 patients) which were non-concordant, the remaining 1334 eyes (667 patients) were classified into five ptotic groups, that is, into over (n=29), excellent (n=415), fair (n=435), mild (n=270), and moderate or severe (n=185) groups. In addition, eyes were subdivided into five types according to the iris-pupil complex position within the palpebral fissure.

**Results:** VIPs were over 95% in the over group, from 85% to 94% in the excellent group, from 78% to 84% in the fair group, from 70% to 77% in the mild ptotic group, and below 70% in the moderate or severe ptotic group. The patients in the ptotic eye group required surgery for blepharoptosis. Iris-pupil complex relation to the palpebral opening was classified into 5 eye types; standard (n=961), scleral (n=266), sinking (n=151), retracted (n=3), and fish (3).

**Conclusions:** The authors devised a new prospective measurement method for assessing blepharoptosis in a clinical setting. Graphical comparisons between the devised method of measuring visual iris-pupil complex percentage and mathematical estimations showed that the devised method is easier, more practical, and more precise for measuring degree of blepharoptosis from general population trends, and that VIP also provides an useful objective index for evaluating the postoperative results of blepharoptosis.