

Reproducibility of non-mydratic retinographies

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Purpose The purpose is to know the stability of the taken registries basic of eye by means of non-Mydratic retinography.

Methods The sample has been of 20 eyes of young people of both sexes between 19 and 35 years old. The measurements were carried out with a non-mydratic retinal camera model Topcon TRC-NW8 in mesopic conditions maintaining the fixation point stable. The number of times in wich each eye was measured was 10. Two coordinates in each of the five points determined were located, points that are: P1_First intersection point between the nasal Vein superior and papilla; P2_First intersection point between the nasal Artery inferior with papilla; P3_First intersection point of the nasal Vein inferior with papilla (the direction always was according to the needles of the clock); P4_First Bifurcation nasal Vein; P5 superior_First Bifurcation nasal Artery superior. For the statistic analysis was used the Statgraphics plus 5.0.

Results OD: $x1= 2735.7 \pm 18.1, y1= 1248.6 \pm 8.12, x2= 2821 \pm 20, y2= 1599.1 \pm 11.94, x3= 2888.6 \pm 18.88, y3= 1554.5 \pm 9.8, x4= 2727.5 \pm 19.2, y4= 1095.5 \pm 9.9, x5= 2347.5 \pm 18.7, y5= 609 \pm 12$ OI: $x1= 1511.36 \pm 6.5, y1= 1153 \pm 12.5, x2= 1507.36 \pm 7.2, y2= 1512.63 \pm 14.7, x3= 1432.45 \pm 8.2, y3= 1497.36 \pm 13.2, x4= 1691.36 \pm 6.5, y4= 988.72 \pm 13.1, x5= 1833.18 \pm 8.2, y5= 840.54 \pm 10.8$ The measurements obtained with non-mydratic retinal camera are very similar, therefore, the variations of the deviation only oscillated between the 0.16% and 4.85%

Conclusion The reproducibility of the registries of non-mydratic retinal camera is very elevated for the selected points. These results enable us to consider the retina as a key element to implement in new security devices.