

contained in the training device would be set from 5 mm Hg to 50 mm Hg, increasing in 5 mm increments. As the training progresses, a validation phase would be entered where the ten samples are calibrated in a random fashion in order to ascertain how well the previously trained health care professional can digitally measure IOP.

As shown in FIG. 2, Schiötz tonometer 22 used to adjust pressurized bladders 15 of the training device is calibrated to the latex material by pressurizing latex reservoir 23, fabricated using latex material with a thickness of 0.005-inches or 0.127 mm, held captive within cylindrical cavity 4. Reservoir 23 is sized to replicate spherical latex bladder 15. It has a diameter of approximately 0.78-inches or 20 mm. Reservoir 23 was pressurized by a column of water 20 while monitoring the hydrostatic pressure with digital pressure indicator 21. As the elevation of the column of water 20 was increased above the elevation of reservoir 23, the internal pressure of reservoir 23 increased. A series of measurement was taken at each data point. This calibration of Schiötz tonometer 23 is necessary because the flexible membrane material used the training device has slightly different deflection characteristics than the human eye at various internal pressures. Table I below shows the calibration data for Schiötz tonometer 22 and FIG. 3 shows the calibration curve for this data.

TABLE I

INTRAOCULAR PRESSURE mm Hg	SCHIÖTZ READING 5.5 gm Weight	SCHIÖTZ READING 10 gm Weight
10	14.5	
15	8.8	
20	6.6	15.9
25	4.5	12.3
30	3.5	10.0
35	2.9	8.3
40	2.3	7.1
45	2.1	6.1
50	1.8	5.1

It will be readily seen by one of ordinary skill in the art that the present invention fulfills all of the objects set forth above. After reading the foregoing specification, one of ordinary skill will be able to effect various changes, substitutions of equivalents and various other aspects of the present invention as broadly disclosed herein. It is therefore

intended that the protection granted hereon be limited only by the definition contained in the appended claims and equivalents thereof.

Having thus shown and described what is at present considered to be the preferred embodiment of the present invention, it should be noted that the same has been made by way of illustration and not limitation. Accordingly, all modifications, alterations and changes coming within the spirit and scope of the present invention are herein meant to be included.

We claim:

1. A training device for digital assessment of intraocular pressure in humans comprising:

a housing having a plurality of cavities therein; said plurality of cavities each having a simulated human eyeball therein; and

means for providing an intraocular pressure within each said simulated human eyeball;

wherein said means for providing an intraocular pressure is independently adjustable to provide an identical pressure or a random pressure in each simulated human eyeball.

2. The device of claim 1 wherein said simulated eyeball comprises a liquid filled bladder.

3. The device of claim 2 wherein said liquid filled bladder is spherical in shape.

4. The device of claim 2 wherein said liquid is saline.

5. The device of claim 2 wherein said liquid is silicon.

6. The device of claim 2 wherein said means for providing an independently adjustable intraocular pressure within each said simulated eyeball comprises a plunger for compressing each said simulated human eyeball within each said cavity.

7. The device of claim 6 wherein said plunger uses a rod threaded into said housing to adjust the position of said plunger.

8. The device of claim 7 wherein said plunger is pivotally mounted to said rod.

9. The device of claim 1 wherein said simulated human eyeball comprises a low viscosity silicon gel.

10. The device of claim 9 wherein said means for providing an independently adjustable intraocular pressure comprises a plunger for compressing said silicon gel.

* * * * *