School of Medical and Allied Sciences

Course Code: BOPT3004 Course Name: PAM

POTENTIAL ACUITY METER

DEFINITION

*The PAM has been found to be a very promising instrument, it correctly predicts the postoperative visual acuity in pt, with moderate cataract.



I NSTRUMENT DESIGNS AND OPTICS

- Pam was introduced by Guyton and Minkowski
- It is a small device that mounts on a slit lamp and projects an image of a sellen's visual acuity chart, through clear areas in the lens on to the retina.
- *A knob on the PAM permits rapid focusing of the letter chart, using a slide scale ranging from +13D to +10D.

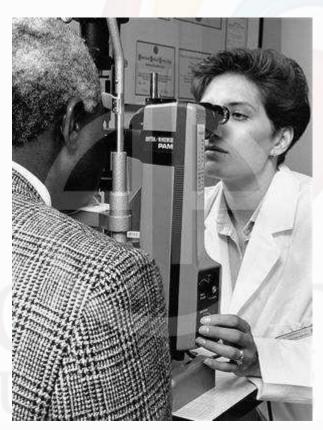
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*Black optotypes on a white background create a range of snellen's acuities from 20/20 to 20/400

TECHNIQUE

- The test is best performed with the pupil dilated
- The pt should also wear his on her best spectacle correction

During this procedure a tiny beam of light is directed through the pt's pupil on to the retina this light beam actually contains a visual acuity chart with letters for the pt's to read. pt's simply read the chart to the best of their ability just as they would with the more familiar visual acuity wall chart



IAS ITY

COMPARATIVE STATUS OF LI AND PAM

- Both are subjective method
- *The PAM has the adv; of using the snellen's chart, which is familiar with pt's
- In LI using sine wave patterns. It may be unfamiliar task for most pt's.

FACTORS AFFECTIN ACCURACY OF PAM AND LI

- Severity o the catract
- Type of catract
- Preoperative visual acuity of 20/200or worse

CONCLUSIONS

- In moderate cataract both LI and PAM use full
- In severe cataract the PAM under estimate the potential vision more than the LI
- For eyes with retinal disorders the LI test over estimate test potential vision
- In pt's posterior sub capsular cataract both under estimate potential meter
- The LI and PAM test result are note always in agreement



Super Pinhole



References

- Clinical Ophthalmology Borish
- Comprehensive ophthalmology Jack J kanski