

POTENTIAL ACUITY METER

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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.

CONT.....

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

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TECHNIQUE

- ❖ The test is best performed with the pupil dilated
- ❖ The pt should also wear his or 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



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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 AFFECTING ACCURACY OF PAM AND LI

- ❖ Severity of the cataract
- ❖ Type of cataract
- ❖ Preoperative visual acuity of 20/200 or 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

A large, faint watermark logo of Galgotias University is centered on the slide. It features a stylized circular emblem with three curved, overlapping bands in shades of yellow, blue, and red, resembling a 'G' or a globe. Below the emblem, the text 'GALGOTIAS UNIVERSITY' is written in a light gray, serif font, with 'GALGOTIAS' on the top line and 'UNIVERSITY' on the bottom line.

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