

RELATIVE AFFERENT PUPIL DEFECT HOW TO ASSESS

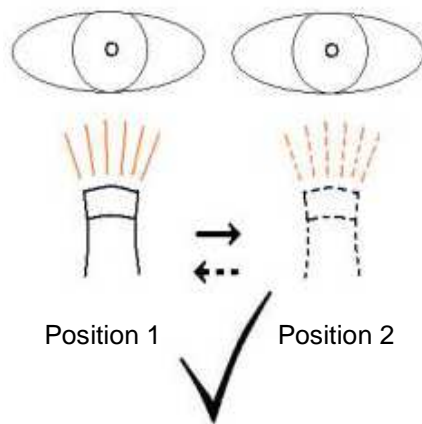
Method:

To compare the right and left afferent pathways, the amount of light that falls on the fovea of each eye must be the same.

To achieve this, ensure that the light source has the same relationship to the each visual axis, and is held in this position for the same length of time (A).

Take especial care if manifest strabismus is present (B), and adjust method if only one pupil can constrict (C).

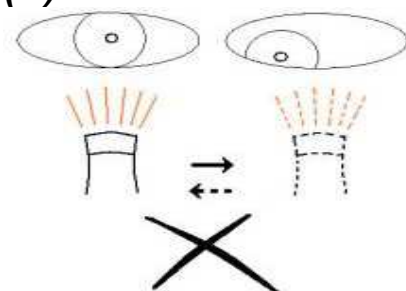
(A)



1. Ask the patient to fixate in the **distance** and hold the light source for 3 seconds in position 1. Assess the degree of contraction and how long it sustains.
2. Move the light source to position 2. and hold for 3 seconds. Assess the degree of contraction and how long it sustains. Compare with what you remember from the other eye.
3. Move light source back to position 1 and hold for 3 seconds. Assess the degree of contraction and how long it sustains. Compare with what you remember from the other eye.

Repeat the swing from side to side until you are sure whether one side contracts less or sustains for less time (+ RAPD), or whether the pupil reflexes are equal in these respects (- RAPD).

(B)



Unequal stimulation of foveas may produce an artefact. Adjust light source position to avoid this.

(C)

What do you do if only one pupil is able to respond?

In this situation the afferent can still be assessed by the same swinging light method. Instead of examining each pupil as you direct the light towards it, you examine the **working** pupil throughout the test. Then compare the **direct** response from that eye with the **consensual** response from that eye.

This consensual response tells you what the other afferent pathway is like: hence allows comparison between the two eyes