

## **ABNORMAL RETINAL CORRESPONDENCE**

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## **ABSTRACT:**

This paper describes about Abnormal Retinal Correspondence and its types.



## **INTRODUCTION:**

Abnormal Retinal Correspondence is a condition where one eye images of an object are fallen on the foveal region and in another eye images of an object are fallen on the para foveal region.

It is a binocular phenomenon and adaptation mechanism because due to Abnormal Retinal Correspondence (ARC), patient does not feel Diplopia. In case of ARC, one eye images are fallen on the para foveal region and it is called Pseudo fovea. Always it is remembered that this Pseudo Fovea is acts as a True Fovea.

Due to this reason, before strabismus surgery always at first ARC position should be look out. Because after strabismus surgery, when images are fallen on the original fovea and patient is getting problem due to patient is accustomed on Pseudo fovea.

There are two types of ARC

-  Harmonious ARC
-  Unharmonious ARC

But this classification doesn't have any clinical importance.

### **HARMONIOUS ARC**

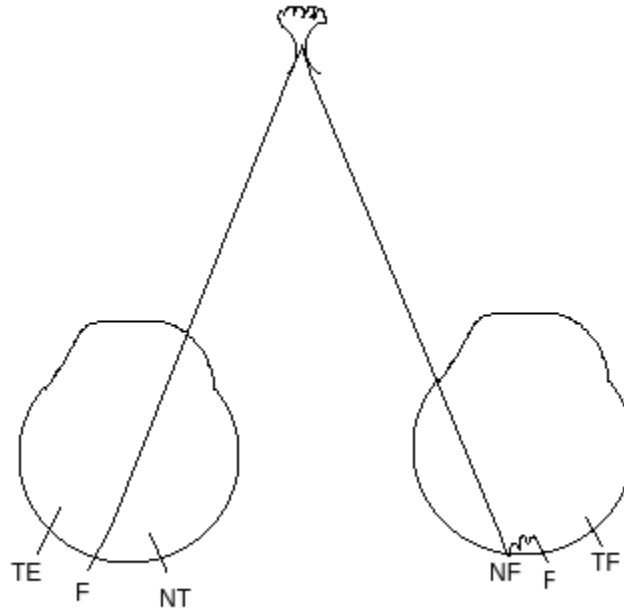
In case of Harmonious ARC, Ocular Deviation is equal to Pseudo fovea offset (from the True fovea). The amount of Pseudo Fovea offset is called Angle of Anomaly. Angle of Anomaly is equal to Ocular Deviation, it is called objective angle.

### **UNHARMONIOUS ARC**

Sometimes, Pseudo fovea offset is not match with the Ocular Deviation, and then it is called Unharmonious ARC

Clinically Harmonious ARC and Unharmonious ARC are not important but sometimes Paradoxical Diplopia is concern. In case of Paradoxical Diplopia, in

Exo deviation, UN crossed diplopia is present and in case of Eso deviation, crossed Diplopia is present.



Always it is remembered that Abnormal Retinal Correspondence is present within 15 to 30 prism diopter because peripheral fusion may be present.

Sometimes Strabismus is associated with Abnormal Retinal Correspondence during this condition when Strabismus surgery is done and ocular deviation is fully or partially corrected then patient is getting problem also because here images are shifted from the Pseudo fovea to other region and patient will get complain of double vision. It is called Paradoxical Diplopia.

But fortunately, Paradoxical Diplopia will not be persisting for a prolonged time and like a true Diplopia, Paradoxical Diplopia will not create problem.

But it should be remembered that when ARC patient is seeing binocularly then central orientation occurs and images are displaced from the Pseudo Fovea to Normal Retinal Correspondence.

During Baglioni Striated Glass test if Strabismic Patient will feel complete 'CROSS' OR 'X' pattern, then patient have ARC.

ARC is a binocular phenomenon and always it is remembered that ARC should not be confused with Eccentric Phenomenon. Eccentric Phenomenon is an indication of Amblyopic and Eccentric Phenomenon may be Uniocular also.

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