## Advantages of Strabismus

1. Reduce the "playing field"

- Reduce the
 functional area of the visual field to which a patient diverts energy/ attention
- By suppression
- By eso-deviation



## Advantages of Strabismus

2. Reduces NOISE in the visual input:

- Repositions/ suppresses the data originating from an eye with reduced clarity (noise)
- By Suppression
- By Anomalous Projection



## Advantages of Strabismus

3. Reduces conflict over the fusable retinal areas (i.e., central is temporal「etif!al)

- Nasal retina projects to temporal field: monocular visual processing area


Repositions/ suppresses the data originating from an eye with reduced clarity (noise)

- By Suppression

- By Anomalous Projection (AP)

NP = Normal Projection


## Advantages of Strabismus

3. Reduces conflict over the fusable retinal areas (i.e., central retina \& temporal retina)

- E.g., Large angle ETs separate temporal retina by increasing the



## Advantages of Strabismus

3. Reduces conflict over the fusable retinal areas (i.e., central retina
\& temporal retina) turn, reducing potential for fusion

- Nasal retina projects to temporal field, which is the monocular visual processing area:
- Brain can process info striking nasa retina OD simultaneously without trying to pair it with info coming
- This is wiy
- This is why patients with Esotropia often have trouble relating information between the two eyes:
Information is processed in parallel but not coordinated.

E.g., Large angle XTs ALSO increasing the turn.
- Nasal retina projects to temporal field, which is the monocular visua processing area:

- Brain can process info striking nasa retina OD simultaneously without trying to pair it with info coming from OS.
- In the case of XT, some of these
 patients develop "panoramic viewing," and use information from both foveae.


## Advantages of Strabismus

## Advantages of Strabismus

4. When allowing big picture to take priority over details: lowers physiological stress

- "Let someone else work out the details"
- Exotropic tendency

5. When allowing details to take priority over big picture: ALSO lowers physiological stress

- When enabling driver/passenger system:
- Suggests difficulty with teamwork;
- Easier to have a single, clear leader.

Role assignment over an area of space, especially in anisometropes.

- Chicken \& Egg!
- These are indications of a generally stubborn personality type with a clear sense of what they wish to accomplish.
- Such people will need to be convinced FROM THE INSIDE of the advantages of an alternate (binocularly integrated, cooperative) mode of function.
- Baby steps... (...but to where?)
- Esotropic tendency


## FLOW CHART, overview



## FLOW CHART, overview: A-track



## FLOW CHART, overview: C-track



## FLOW CHART, overview: B-track



## FLOW CHART, Beginning



## FLOW CHART, A/B Track



## FLOW CHART, End, A-track

5A.
Assess the Bl and BO range over which the patient can successfully blend images.

6A.
Choose a comfortable power of Fresnel prism, in the middle of the range. Send patient home with compensating prism on spectacles.

7A.
Home therapy with compensating prism:
(Long term goal is to reduce the power of prism compensation over time.)


## FLOW CHART, Beginning



## FLOW CHART, End, C-track




> 4C.
> Slowly reduce prism power and observe response at each step.

> Note where (which prism)
> the images switch
> to give an AP response.

## 5C.*

Dispense Fresnel placed on R/G glasses which is well into NP zone. Have patient
wear red over non-preferred eye.
Wear Fresnel-R/G's
every possible waking hour x 1 week.*

Re-assess at next visit:
Go to 1

## FLOW CHART, Beginning



## FLOW CHART, A/B Track



## FLOW CHART, End, C-track

```
3C.
    Have patient sit with
    over-correcting or opposite
        prism and OBSERVE,
            ~3-5 minutes.
Images should remain on the
        "appropriate" sides,
    (i.e., as expected with NP).
```



4C.
Slowly reduce prism power and observe response at each step. Note where (which prism) the images switch
to give an AP response.

## 5C.*

Dispense Fresnel placed on R/G glasses which is well into NP zone. Have patient
wear red over non-preferred eye.
Wear Fresnel-R/G's
every possible waking hour x 1 week.*

## *Alternative:

 May use binasal occlusion to (a) stop patient from embedding anomalous adaptation and (b) facilitate simultaneous perception without confusion.

