

How to examine a strabismus patient in 15 minutes



Dr Ross Fitzsimons
Kristen Saba

Aims for the day



- 1 not be afraid of diplopia...
bored maybe, disinterested maybe, but at least know what to look for and what it means. To have Control and confidence.
- 2 have a template to assess a strabismus patient that is useful .
- 3 to be able to help the patient or their parents, find out what they are afraid of and help them deal with it. Often it's not what you are worried about. This is an area where you can do a great deal more than just collect data for the doctor. KS talk
- 4 to know more than the dr. It is your area.
This is the easiest

Problems with strabismus



Why "ophthalmic" orthoptists are *afraid of or dislike* strabismus

1. takes too long to assess
2. don't see strabismus cases enough
3. can't remember what all the tests are for and when to do them
4. Don't know what to do., just unpleasant feeling
5. This may be a life threatening problem but I think this worries Dr more than you. Try to help them.

	ESOTROPIA	EXOTROPIA	HYPERTROPIA
CHILD	Infantile Accommodative Sensory Duane's	Intermittent Consecutive Congenital	Inferior Oblique DVD IVth Brown's CFEOM
ADULT	Residual Vlth Thyroid	Consecutive Decompensating Sensory	IVth Thyroid Blowout
ALWAYS CONSIDER:	Myasthenia	Illrd nerve palsy	Temporal Arteritis

Steps in Examination



- **History** 3 minutes
- Spectacles
- Vision
- Pupils
- Head Posture
- Cover Test
- *write down the 3 common causes*
- Ocular Movements
- Binocular Vision
- Cycloplegic Refraction
- Fundus Examination

HISTORY



- "what is it that bothers you most?"
find out what they are afraid of..
- Diplopia * Cosmesis
- Asthenopia * Reassurance *Second opinion

Why do you need to know glasses?



1. can they see the chart/target
2. prism...changes CT
3. Plus...accommodative eso
4. Minus...int xt
5. Bifocal...high AC/A ratio

Why is vision important?



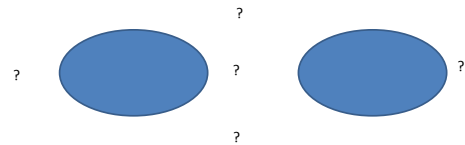
- Children: what test do I do?
- Adults: making sure you do it.

Fixation Preference



- Alternating 6/6
- Maintained through a blink 6/12
- Maintained but not through blink 6/24
- Not maintained 6/36
- Does not take up fixation < 6/60

Cover test recording template



- Is the patient a child or adult?
- Do the primary position cover test then list the 3 most common causes (refer to the diagnosis table)

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If I can't do a cover test??...



KRIMSKY

measures the displacement of the CLR from the centre of the pupil using (loose) prisms.

HIRSCHBERGS TEST

- Infants
- < 6/60 vision
- Pupil ~15 degrees
- Midway ~ 30 degrees
- Limbus ~ 45 degrees

Ocular Movements

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EYE
SPECIALISTS

Use a light

- 'H' pattern checking obliques
- Ductions and versions
- Restriction vs. under action
 - saccadic velocity
 - forced duction
 - forced generation

Nystagmus observe and describe

3 questions.

- Are they normal?
- Is there any reduction?
- Is it restrictive or paretic?
- Muscles **don't** overact?

OCULAR MOVEMENTS

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- Herring and Sherrington
- Strabismus specialists can't reliably agree.
- Prime interest is to identify underacting muscles and decide if paretic or restrictive
- Record OM ductions on CT grid..

MUSCLES DON'T OVERACT!!

Nystagmus

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- Uni or binocular
- Horizontal, vertical, rotatory
- Conjugate, disconjugate
- Jerk, pendular
- Null point

Is the patient binocular?

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- Do they have a phoria?
- Do they have an area of single vision using a head posture?
- If they look straight, try Worth's lights, Bagolini or Langs.
- If they have a big tropia...don't do anything.

BINOCULAR FUNCTION



- Tropia vs. phoria
- Field of BSV
- 4^ Base out - monofixation
- 15^ fusion
- Bagolini gls
- Worth's Lights
- TNO
- Synoptophore
- Prism Fusion Range
- Post op diplopia test

3 questions:

1. Is the patient binocular?
2. What is the potential for binocularity?
3. Are we going to do anything about it?

STEREOPSIS

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- As an indicator of binocular function or the potential for this.
- TNO 15"
- Lang 200"
- Titmus 40"
- Synoptophore present or not
- Normal 40"



Cycloplegic Refraction

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- Cyclo Atropine
- More important to ask when, not how.

Cyclopentolate 1%, repeat in 5 minutes and reframe
45 minutes later.

Atropine 1% bd for three days

