

WWW 1 – Season 2



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**Experts' Answers to Audience Qs for Case 1 (Presented by Sandra Ganesh)**

1. How common is XT Duane?

FV: Uncommon among all Duane but the incidence is increased in non-Caucasian males.

NED: Much less common than ET Duane but we do see it

2. How common is vertical deviation?

FV: More common than reported because sometimes we only see them in secondary gazes or after surgery.

NED: Agree

3. Would anyone do an IO recession in this case?

FV: I have done recessions combined with horizontal rectus muscle. It works well in cases where it is indicated; for example: fundus excyclotropia, No downshoot, Hypertropia in primary position.

NED: I would not do IO recession for this case. Would do Y-split for the upshoot

4. Was it basically a tenotomy reattachment?

FV: Not necessarily; a 1 mm in Duane may represent much more because of mis innervation.

5. What is the logical explanation how the MR Sx? worked?

FV: This is not correct. The Esotropia in left gaze is not better postoperatively.

6. Y splitting with recession? Or just Y split?

FV: I like this procedure to manage anomalous vertical movements. I do recess it there is exotropia in primary position.

NED: I combine Y-split procedure with recession to help both with shoots and the Exotropia

7. Do you consider it appropriate to intervene in a child with surgery where you corrected strabismus?  
What treatment is most appropriate in children and later in adults?

FV: I don't think age makes a difference in the type of surgery unless the muscles are very tight.

NED: Surgical considerations include Abnormal Head Position, Horizontal\Vertical deviation, Ductions, Up/Down shoot, Muscle tightness. Age makes less of a difference

8. What do you think is the probable diagnosis in this case?

FV: Left Duane's syndrome

NED: Left Duane's syndrome

9. Do you think it's an innervational / mechanical upshoot in this case?

FV: Both. Started mis innervational.

NED: combination of both

10. How would you differentiate between the two?

FV: Hypertropia in primary. Severity. Timing. Passive forced duction test.

NED: Agree

11. How would your management of upshoot differ based on etiology?

FV: Depends on hypertropia in primary position.

12. Which of these issues would you definitely consider correcting, in this case?

FV: All of them

NED: Depending on the patient's complaints. Will try to address all of them

13. What is your procedure of choice to reduce upshoot / downshoot?

a) Y splitting of lateral rectus

FV: Yes

NED: this is my procedure of choice

b) Deactivation of lateral rectus

FV: Could help

c) Recession of both lateral and medial recti

FV: Very careful due to co-contraction

d) Posterior fixation sutures on horizontal recti

FV: Don't like this procedure; limits rotations

e) Superior rectus recession

FV: Only to manage hypertropia

f) Varies based on the case

FV: yes.

NED: Yes

14. When there is some action of lateral rectus muscle present, in a case of exotropic Duane's, would you consider improving abduction further?

FV: depends on what is done to improve the exotropia in primary position. Of the LR is recessed defunctionalized yes, I do try to improve abduction

NED: Depending on each case. Sometimes would add a vertical rectus muscle transposition

15. If so, what would be your choice of surgical procedure?

FV: Transposition of a vertical rectus muscle

NED: Transposition of a vertical rectus muscle

16. Have you ever combined Y split / deactivation of lateral rectus with VRT +/- augmentation? What is your experience and how is the result?

FV: Yes. It helps to maintain alignment. Some rotations. Better upshots and downshoot. I have done it a handful times.

NED: Yes, I have done a few times, it helps with rotations and upshots and downshoot

17. What is your experience with posterior fixation for shoots?

FV: It can work if sideslipping is demonstrated

NED: Didn't try it, in my experience Y-split works for the shoots

#### **Experts' Answers Audience Qs for Case 2 (Presented by Anna Waldie)**

18. In a neutropaenic patient with candidaemia, when should a dilated fundus examination be performed?

PN: Within 1 week of diagnosis

SJ: Within 2 weeks of diagnosis - Yes, ideally, it should be daily. But this may not be practical. Since candida grows slowly, a biweekly exam would be practical and also not allow fungus to grow too much out of control. This is also based on retrospective large series in patients with candidemia not necessarily neutropenic patients. Why should we make different guidelines for neutropenic patients? Logically one would think that they are more vulnerable to disseminated infection so it would be better to see them earlier rather than later; esp. when fungus identified is known to be multi drug resistant, one would screen fundus earlier. Also, one needs to think of undilated fundus photography methods to screen, so that it could be done by any doctor and not necessarily by an ophthalmologist. Teleophthalmology option needs to be explored.

Within the 1<sup>st</sup> week after recovery from neutropaenia - This is based on very low level of evidence as per the guidelines themselves and so is not a robust guideline to follow

When the patient reports symptoms - Many are asymptomatic; also, patient may not be in a situation to report symptoms like comatose, children, etc.

19. In a patient with pancytopenia, what additional precautions would you take prior to performing an intravitreal injection?

PN: No additional precautions

SJ: No additional precautions; it is a tiny prick. Use smallest gauge needle and use all aseptic processes strictly and deliberately. Risk of haemorrhage or infection remain low.

20. What would be your suggested management for *Candida Krusei* chorioretinitis?

PN: Intravitreal amphotericin b (non-liposomal)

SJ:

- a. Intravitreal voriconazole - not my favourite, because half life is short and needs repeated injections
- b. Intravitreal amphotericin b (non-liposomal) - yes if 2 -3 weeks of systemic therapy do not work. Also, check antifungal drug sensitivity to decide on the drug. Our published data on neonatal endophthalmitis in European JI of Ophthalmology showed that all eyes with candida in preterm babies in NICU were salvaged where combined systemic and intraocular therapy were delivered. In a similar series from Bascom Palmer, none of the eyes were salvaged and none received intraocular therapy. Numbers are small in both series. Systemic therapy should be continued at least 2 weeks beyond the disappearance of the clinical lesions, to prevent a rebound from any lingering infective focus. Antifungals being mostly fungistatic need to be given for longer time. In an adult, we published one of the first reports of systemic Itraconazole also working very well in very severe candida in the retinal vessels, with no intravitreal injection.
- c. Vitrectomy - only if vitreous membranes develop.

21. What is your differential diagnosis? What further ancillary tests or investigations would you do?

PN: WRT 'What is your differential diagnoses?' - Aspergillosis Tuberculosis. WRT 'What further ancillary tests or investigations would you do?' - Tap and culture at the time of vit real injection

SJ:

- a. Miliary tuberculosis: will show up on Chest X ray or CT chest.
- b. *Pneumocystis carnei*: is quite rare, but to be considered: will show up as Pneumonia in lungs and can be confirmed with cytology of lung washings.
- c. *Other fungi like Histoplasmosis*. However, that is more insidious and associated with juxtapapillary lesions.
- d. Multifocal CSCR: we do see this in patients who are on steroids and they develop multiple foci of serous detachments and pigment epithelial detachments. Of course, the appearance would be little different

22. Is she on enough of the correct treatment? What are the treatment challenges – what would you do next?

PN: Yes; just more injections, if needed

SJ: continue therapy at least 2-3 weeks before thinking of switching or adding additional therapy. Do drug sensitivity and use that if the lesions do not show a change in 2-3 weeks. Also add intravitreal ampho B.