Answers to Audience Questions - WSPOS Worldwide Webinar 18: Inaugural WSPOS Global Grand Rounds

WWW 18 Panellists

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1. How many times can one try surgical correction of strabismus?

DBG: Twice for each component as horizontal, vertical

SJ: I will do a maximum of four procedures per eye but it depends on the muscles as well.

DG: I don’t have a number. I look at what was done, Iris angiography, the status of the patient etc. Often creative approaches allow another approach like conjunctival recession and resection.

2. How useful is the head tilt test in detecting Brown syndrome?

DBG: Very useful

SJ: Not very as its most useful to detect neurological strabismus

DG: The 3-step test isn’t that helpful in non-paretic vertical disease. Tilting the head is valuable in Brown syndrome.

3. How often do you see horizontal deviation in brown syndrome?

DBG: Less than ¼

SJ: Not often in my practice

DG: Less than 25% do I see significant horizontal disease.

4. What OCT findings would point to the patient diagnosis?

DBG: Dysversion

SJ: I don’t use OCT for Browns

DG: Retinal imaging may show torsion.

5. How often you see familial Brown syndrome?

DBG: very rare
SJ: Rare but once a month or so

DG: Not common in my practice.

6. **What would have been your surgical choice in the first case (of Goura’s presentation)?**

DBG: Yes

SJ: I would have used a silicon band as an expander rather than a free tenotomy of the SO tendon as I find it gives me better results and avoids a postop SO palsy.

DG: I often use a technique where I recess the SO to the nasal side of the SR about 8mm back using intraoperative adjustable sutures and comparing to the forced ductions on the contralateral eye.

7. **What would been your surgical choice in the second case (of Goura’s presentation)?**

DBG: Not without the intraoperative examination

SJ: I would have probably done exactly the same

DG: Likely similar.

8. **Do you advise an MRI in children with congenital brown? If yes, what’s your most common finding?**

DBG: Yes, looking to pulleys

SJ: I don’t unless there is ambiguity about the diagnosis or unusual features

DG: Generally, not unless there’s something unusual. However, the forced ductions and intraoperative evaluation become very important.

9. **Have you done IR recession in any case of brown syndrome?**

DBG: No

SJ: Not so far

DG: I think you are describing a Brown mimicker. In those settings the IR might be the issue.

10. **WRT Anteriorisation of IO, does the panel go with or without ‘J’ deformation?**

SJ: Without, as I like to avoid an antielevation syndrome

DG: I will use the J deformation and place the IO behind the insertion of the IR bunched together to avoid anti-elevation.

11. **How many people do family pedigrees on strab. cases?**

DBG: I do if they report a family case

SJ: I will always ask about family history

DG: Always.
12. How big should the horizontal deviation in Browns be before considering adding steps to address it?

DBG: 25d deviation

SJ: It’s really a case of when it becomes an issue for the child, makes them adopt a head posture, gives them diplopia etc. I usually wouldn’t correct anything less than 15 dioptres

DG: If on orthoptic evaluation it appears key to post-operative success. Otherwise I might wait for the post op evaluation in a child. In an adult I’d use adjustable sutures.

13. Do the panellists think the TYPE of anterior segment OCT matters?

DBG: Yes, intraoperative has less definition however is easier to use in children under GA

NSD: Not specifically, chose the one you can handle best that differentiates between the layers in detail.

SJ: Not in my opinion as long as a reliable scan obtained with patient cooperation

DG: To my knowledge the type does not matter. The key is being able to get the exam.

14. What would the differential diagnosis be for case 1 (of Jamila’s presentation)? Could it be Schnyders?

NSD: Schnyder is a more disc like central opacification in the anterior cornea, slowly progressive. Sometimes with polychromatic crystals, but not always (often not in childhood). So, a completely different appearance.

SJ: I would place Adenoviral conjunctivitis associated corneal lesions very high on the differential diagnosis.

15. What about the fact that the cornea between the lesions was clear? That’s not what macular should look like. Why do the experts think that happened? Have they seen bilateral HSK?

DBG: Child is young at the beginning of the disease that could explain the aspect

NSD: In children the presentation of corneal dystrophies is different from adults. Much less severe and sometimes less characteristic. Corneal haze develops with time. Examination of parents might help to find your diagnosis

SJ: I have not seen bilateral HSK personally.

DG: Very young children manifest differently.

16. How often do the panellists see thygeson SPK?

DBG: This child was referred with that diagnosis. WRT ‘How do they treat thygeson?’: Relatively often. Treated by lubricants, steroid drops or cyclosporine

NSD: A few children / year. The corneal lesions are larger than punctate lesions and elevated, with minimal stromal reaction. I treat with lubricants and low dose steroid drops until complaints (photophobia, discomfort, blurred vision) are gone.

SJ: Not very commonly in my practice. Tends to be older patients with asymmetric disease. Topical steroids mainstay of treatment

DG: Not common for me.
17. If the second child becomes symptomatic with erosions, what type of CL would panellists use?

DBG: I would prefer scleral lens

NSD: I usually start with a soft lens (bandage). If this does not alleviate enough, change to other lenses for scleral.

SJ: I am very careful with contact lenses in children, especially those younger than 12. It would need a discussion with the parents and an assessment of suitability of the child. Soft contact lenses work best.

DG: I’d use a soft lens to start. I also have corneal specialists I’d involve.

18. Are punctal plugs useful to help lubrication?

DBG: Yes, it can be useful however sometimes create inflammation

NSD: Sometimes yes, in severe situations

SJ: Very much so in my opinion but careful counselling is needed

DG: In the right settings.

19. Which lubricants are preferred in such cases?

DBG: Preservative free+++ Hyaluronate Sodium+++ Combined mechanisms lubricants

NSD: No specific ones. Like in dry eye you have to find out what works best for the patient.

SJ: I prefer preservative free lubricants if possible.

DG: Preservative free HA. These are not available in the USA but can be ordered on some online sites.

20. Is avellino dystrophy genetically different from macular dystrophy?

DBG: The gene may be the same

NSD: Avellino is a mutation on the TGFB1 gene whereas macular dystrophy affects CHST6 gene. Avellino is a lattice type.

SJ: Avellino is autosomal dominant whereas macular dystrophy is autosomal recessive.

21. Scleral scatter is performed by:

SJ: By using the slit lamp and dissociating the column of light from the point of focus

22. The majority of corneal dystrophies in children are misdiagnosed on initial presentation unless there is a family history:

SJ: Yes

DG: I would agree.

23. I have seen corneal dystrophies in children under the age of 16:
SJ: less than 10 in my career

DG: Yes.

24. What further diagnostic test would you do for this patient?

DBG: Genetic testing

NSD: As there were no complaints with a bilateral symmetrical corneal abnormality I would do anterior segment OCT or pentacam and genetic testing; and I would try to make pictures and dive into literature if I wasn’t sure about the diagnosis.

DG: I think genetic testing and evaluate the family.

25. Do you use sclerotic scatter in your practice?

NSD: yes

SJ: Rarely