Answers to Audience Questions - WSPOS World Wide Webinars

WWW 23 – Season 2 –ROP: A Worldwide Problem – A Real World Solution

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1. How long should these children be on follow up in the paediatric clinic with the paediatrician?

   KF: Dependently on their general condition but usually there is a follow up until the age of 1 year and after just regular check-ups as all the other children.

   MAMC: Every year for life with laser or with antivegf

   Tapas: A baby born premature should be considered premature for lifelong and preferrably shoiuld be followed up periodically life long.Those treated for ROP must be followed up for entire life.

2. Could you please comment on the dose of anti-VEGF in these babies?

   KF: Not yet applicable

   WCL: Half adult dose of Avastin

   MAMC: There is still controversy in dose, I use 0.01cc

   Tapas: My preferred dose :1/2 adult dose

3. What drops does the panel use?

   KF: After laser treatment: antibiotic + steroid 5-7 days and mydriatics in case of aggressive cases, persistent tunica vasculosa lentis.

   WCL: Mydrin-P or Cyclopentolate

   Tapas: After laser treatment –Antibiotics and steroid drop 4 times a day for 5 days.

4. What about distortion of disease with indentation?

   KF: Have never seen the distortion of the course of the disease due to indentation. While screening one rather rotates the globe then indents; scleral depression during laser treatment or vitrectomy should not impact the course of ROP. Still please don't be misled with possible pseudodemarcation when there is no actual line or ridge or in cases where it may hide the real problem anteriorly. Just move the depressor a little anteriorly, true ridge doesn't move.

WCL: I don't find that as a problem, as a retina surgeon we are used to see the retinal indentation from the scleral depression

MAMC: I try not to indent, but even with distortion pathological new vessels are seen

Tapas:Yes,scleral indentation of the peripheral retina can at times mask a very early demarcation line or an early ridge opposite the area depressed.Similarly the border of the depressed retina can appear like a ridge.Happens typically during initial years of ROP carries.With experience one quickly learns how to overcome this.

5. I'd like to ask Maria Ana and the other panellists what practical criteria they use to retreat with injection? We don't have Angio here, that would be amazing.

   WCL: I don't retreat with anti-VEGF. If there is still active stage 3 or plus disease, I will treat with laser

   MAMC: New plus disease, new pathological new vessels, traction of the vitreous.

   Tapas:Criteria for retreatment post intravitreal antiVEGF for ROP: New vessels at the vascular avascular junction or reactivation of new vessels within the vascularised retina,return of plus component,Very slow retinal vascular outgrowth and the parents non compliant for follow up.
   My mode of retreatment post anti-VEGF is laser most of the time

6. I would like to ask about follow-up protocols post-injection; frequency and duration? And how many post injection get laser fill-in?

   WCL: Follow weekly until the plus and the stage 3 start to regress. Only a small number of case persists after anti-VEGF injection (may be 10%)

   MAMC: WRT follow-up protocols post-injection; frequency and duration - 1 week, 2 weeks, until week 52, then every 3 months 1 year, then every year for a life time, with laser, or antivegf or even not treated we see them for a lifetime.
   WRT how many post injection get laser fill-ins - We barely perform laser anymore, but each case is individualized

   Tapas:My protocol of follow up post inj…Day1,Day 7,2-4 weekly thereafter till 6 months depending on the finding in each visit.Duration and the length of subsequent follow ups depend on whether there is compete regression of the retinopathy and vascularization upto ora serrata or not.
7. Dr. Martinez: What is your age protocol for flying baby position? Do the ones from the NICU also get to be examined?
   MAMC: WRT age protocol for flying baby position - As long as the baby is not intubated we use the flying baby.
   WRT NICU babies also getting examined - Yes, bur with retoma or Pictor pus

8. Do you use Lucentis 0.2?

   KF: Not yet.

   WCL: Yes, in my China location, because Avastin is not approved and is unavailable there.

   MAMC: Lucentis, Avastin or Wetlia, in the same dose 0.01cc

   Tapas: Yes,I do use Lucentis again half adult dose for those who can afford.

9. Dr. Binenbaum:Could a national ROP registry be used to build a local predictive model?

10. How to choose Laser or Anti-VEGF?

    KF: I would prefer using Anti-VEGF in cases where laser treatment may do too much harm due to its volume: zone 1, very posterior zone 2 with aggressive plus disease.

WCL: I limit the use of anti-VEGF for Zone 1 or poster zone 2

MAMC: I prefer VEGF over laser always, laser is only for very isquemia retinas followed by angiogram

Tapas:There is NO RULE of thumb. Laser is my first choice except for Zone 1 posterior or cases with rubeosis iridis (that do not dilate despite attempted laser) and babies who are very sick.

11. How long do you follow up post Anti-VEGF patients?

    WCL: Until full vascularization

    MAMC: Laser, antivegf or babies who did not required treatment should be followed a lifetim

    Tapas: Life time

12. How do you dilute the regular Avastin or any other antiangiogenic for Pediatric use, as you said, in order not to destroy or to do too much of the antiangiogenic effect?

    WCL: I don't dilute

    MAMC: NEVER dilute

    Tapas:I don't dilute

13. Do you perform EUAs with long term follow up?

    KF: For laser patients – no.

    WCL: Yes, if I cannot properly examine or if there is need for FFA

    Tapas: Yes I do couple one or two EUAs with regular outpatient visits in the initial years of life to examine the entire retina with a greater detail both post laser/Avastin. Once they grow up and co-operate well for a good peripheral examinations EUAs are no more required.
    The vitreoretinal adhesion is firm in babies born preterm with or without ROP,with or without treatment.These eyes are at an increased risk of PVD induced retinal break. Besides, those with involutional ROP,the regressed fibrous tissue can contract and lead to a retinal break and a detachment anytime.

14. Is the laser that you performed intensive 360 degrees or only beside the avascular zone?

    KF: 360 degrees in 99.99%; in very few patients peripheral nasal retina was preserved due to far vascularization and no plus-sign on nasal arcades.

    WCL: I treat all the avascular retina

    MAMC: Only avascular zone, why destroy healthy retina?

    Tapas: I am a bit agressive when it comes to laser for staged or APROP.I try to cover all the avascular retina from ridge to ora.Cases with broad ridge and broad fibrovascular proliferation,I add few rows behind the ridge after adequate coverage of all the avascular retina..

15. How do you differentiate an avascular retina from an ischaemic retina clinically?

    KF: Ischemic retina is often different in colour from vasculated retina even where there is no line or ridge yet, the vessels of the vasculated retina are usually very tortuous and dilated, multiple shunts.
    Please also watch out in cases with extremely immature (zone 1) retina when you see very narrow but a bit tortuous vessels, an AP ROP may happen there, it is where ischemia may begin.

You may also use green filter on your IBO, it may be helpful when you do laser and have to decide where to stop in AP ROP cases when there is no demarcation. With the experience one may predict where it is going to “glow” on FAG.

WCL: Clinically where the retinal vessels stop or according to the FFA

MAMC: Avascular is quiet, isquemia has new vessels, dilation of veins , and pathological new vessels in anterior segment

16. Have any of the panellists seen recurrence of Plus disease post Anti VEGF injection ?

WCL: I haven’t

MAMC: It could be plus disease and requires a new treatment
Tapas: I have seen return of plus disease post antiVEGF treatment especially in babies with posterior zone I,babies with very por weight gain or recurrent pulmonary events or hospitalisation post antiVEGF.