Answers to Audience Questions - WSPOS World Wide Webinars

WWW 6 - Season 2 - Widefield Imaging In Paediatric Ophthalmology

















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Why are the images with RETCAM 3 worse than RETCAM 2? Any tips?

DBG: The evolution was done by new engineers as the other left the company I suppose

LW: I'm sorry to say I don't know. As far as I've been told, 3 is better than 2 because of better optics

JH: I have no experience with RetCam2 but RetCam3 offers a better digital technology to allow the capture of wide field high resolution images.

2. Can we use Phoenix Icon camera for anterior segment like RETCAM? and how about the price of this device?

YNS: The Icon can take anterior segment photos and comes with a diffuser that allows external photos as well. Contact Phoenix for pricing.

LW: I haven't tried. In Denmark the price is around 100000 USD - probably much cheaper in other countries.

3. Does anyone have experience with the EPIC?

LW: No

4. Does anyone have problems with the RETCAM pedals, like loss of the plastic cover wire and exposure of the wire?

LW: Yes our RETCAM 2 shuttle also have had these problems

JH: No problems encountered with the foot pedal. It's helpful to always keep foot pedal in its place when not in use and make sure wires are appropriately kept away to avoid damage.

5. What exactly do we need to perform anterior and gonio pictures with RETCAM or any other devices? Do these devices need to be widefield?

DBG: Just need to use the hand piece of the retcam looking at the angle

LW: I do not know

JH: You need to use 130° lens with RetCam. You place a generous amount of a coupling gel at the limbus opposed to angle you want to image. Slightly tilting the hand piece with lens facing the angle, you are able to take images of the angle. Care should be taken to have appropriate focus of image anteriorly at the angle

6. One of the largest groups we struggle with is post-Avastin ROP babies who are followed up week after week until they are 50 weeks or so. Can the OPTOS be used for them? And if so do you have any tips on how to do so?

DBG: It can be performed however Optos is not the best device for it and I recommend Panocam as the hand piece is free of wire

YNS: Yes - flying baby technique as described by Dr. Patel using the Optos

LW: We do not have the optos but in the comments Evka Okna descriped how to do it. You could watch the webinar (& see all the comments in real-time) archived on our WSPOS YouTube channel here.

7. Does anyone have experience with SUOER 8000 ROP camera?

LW: No

8. Can you substitute OPTOS photo for fundus exam with indirect ophthalmoscope for complete eye exam in cooperative children?

DBG: Yes the ultra-wide field is very helpful however you need to check the image is complete.

YNS: I would always perform an indirect ophthalmoscope exam in a child together with OPTOS. You will have a different view with indirect – which is binocular – and also the colour is real. Especially in a cooperative child. It also depends on how good your photographers are – you would have to review the OPTOS images to ensure they were complete.

LW: Probably yes- even though I prefer the higher resolution of the TOPCON fundus camera

9. Dr. Sharma, with the RETCAM MII montage, for the price, does the montage feature / software come with it?

AS: Motage is not yet incorporated in MII Ret Cam App. We are trying to incorporate it next update. Best Montage software for any retinal image (not limited to smartphone images) can be found at following link https://www.dualalign.com/retinal/image-registration-montage-software-overview.php

LW: I should think all is included. Price in Denmark for the shuttle around 125000 USD

10. How does one go about buying the MII RETCAM?

AS: MII Ret Cam can be ordered online via following link http://miiretcam.com/buy.html In case of difficulty, kindly send me a WhatsApp message at +918248844315

LW: I would check their webpage for local distribution

11. In PHOENIX ICON you can change the gain rather than the lightning and this is very useful for non-dilating pupils

YNS: Yes

LW: Yes

12. We use Icon as well, do you do images with anesthesia and from what age on?

YNS: Yes – we use under anesthesia, usually in combo cases i.e. patient is being sedated for a procedure / MRI etc and we perform our EUA simultaneously. No age limitations

LW: We use Retcam in anesthesia if required-but mainly for babies

13. What's the price of this system (PHOENIX)?

LW: In Denmark the price is around 100000 USD

14. Can you take FA images with the NEO FORUS?

DBG: To my knowledge impossible however they work on it

SJ: It will be launched this year

LW: I don't know

15. Can icon take anterior segment photos with high resolution?

YNS: The Icon can take photos which are good resolution but for more details please reach out to Phoenix they can answer this. I don't use the Icon for this purpose frequently.

LW: I don't know

16. Should we be screening all our patients with widefield/ultra-widefield imaging?

DBG: I do screen all my patients if the examination is possible

YNS: This is resource-dependent per institution, but as discussed at the end of the Webinar, we do this for our adult retina patients, and has become the norm, so more use in paediatrics should be promoted for the most thorough exams and documentation.

SJ: That would be ideal. Still scope for better and inexpensive portable cameras

LW: I disagree- it is not necessary unless you expect something retinal. I do not think you should be screening everyone it is costly, your "yield" is very low if you have no suspicions, not always accessible, I would rather use my sparse staff for other things, you are not using your families resources wisely and it is not just fun to have your picture taken. So unless needed I don't

17. We have a broken RETCAM2 and we can't find any spare parts. Does anyone else have this problem?

DBG: You could contact a company that sells second devices "OPHTAZONE"

SJ: yes we too have the original Retcam and FFA that company has not repaired. Overall repair and service of Retcam has always been very poor

LW: Yes our Retcam shuttle 2 has the same problem- and we couldn't get spare parts

JH: It's probably helpful to contact medical representative of Natus for maintenance and repair

18. Which modality gives the best images in both very hypo and hyper pigmented fundii?

LW: Probably ICON

19. We have difficulty with the light metering with the RETCAM 3, especially with calcified retinoblastoma tumours- the periphery gets bleached out. Any tips/tricks?

LW: No

JH: It's helpful to take two images of different light intensity to show different part of fundus clearly and then fuse them, also you can edit images after taken them so you can highlight pathologies and signs. It's also helpful to trouble shoot the automatic white balance as illustrated in the manual to help display colours correctly

20. Jamila Hiasat: Which mydriatic drops do you use in new-born babies for ROP screening?

DBG: I use tropicamide and neosynephrine 2.5%

YNS: Cyclomydril (0.2% cyclopentolate, 1% phenylephrine) 1 drop BID Q5min – use until 6 months of age, then cyclopentolate 1% 1 drop BID Q5min after 6 months of age.

SJ: We use 2.5 % phenylephrine and 1% Tropicamide three applications 5 minutes apart. Pupil dilates well in 15-20 minutes and lasts an hour. alternate, 0.5% cyclopentolate twice. Pupil dilates in 20-30 minutes and remains for 2-3 hours

LW: We use baby strength phenylephrine (2.5%) and tropicamide (0.5%) twice 15 minutes apart

JH: Cyclomydril: cyclopentolate hydrochloride 0.2%, phenylephrine hydrochloride 1%

21. Has anyone tried VISTA VIEW VOLK for ROP or other retina disorders in children?

LW: No

22. What about the Nun IR ODocs and the possibilities to use a IA Platform for retina images in children?

SJ: Neo Forus will be coming up with AI based systems in future. already some data published by Anand Vinekar who is working with them.

LW: I don't know

23. Could you use an 3-mirror lens or widefield lens with the MIIRETCAM?

AS: Not 3 mirror but yes 20,28,40 D lenses can be used.

LW: I don't know