

Diabetic Retinal Screening Photography

Tips on how to take digital retinal images to NHS National Standards

by

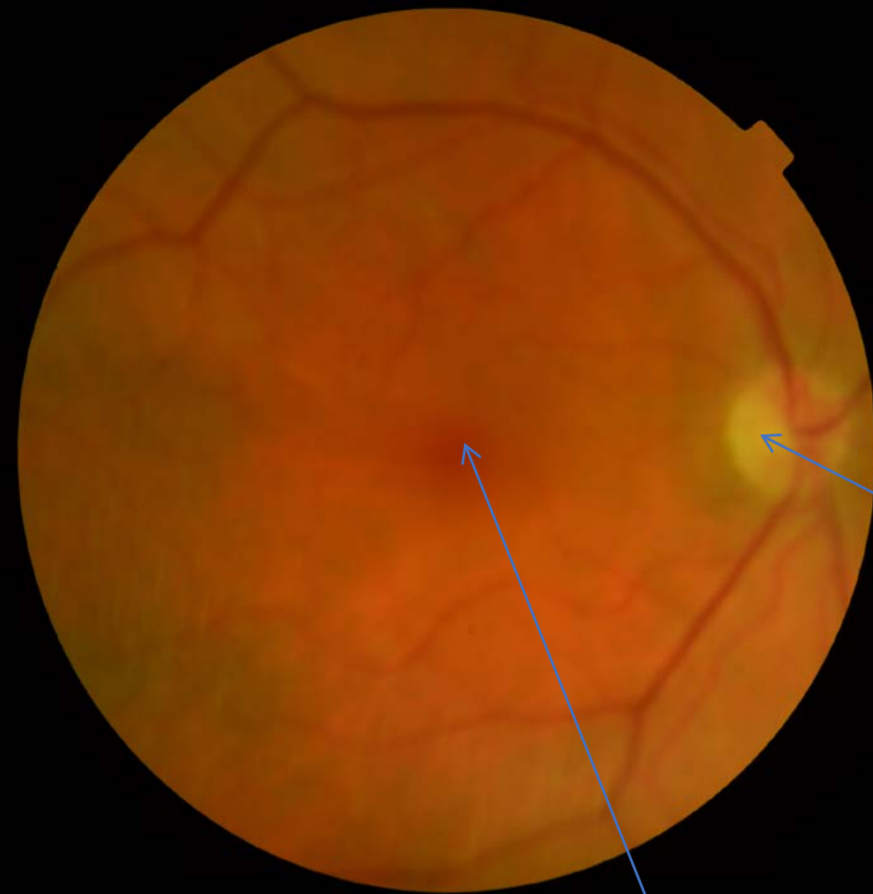
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NHS Diabetic Retinopathy Screening

Programme

? How do you avoid taking a Fuzzy Image like this

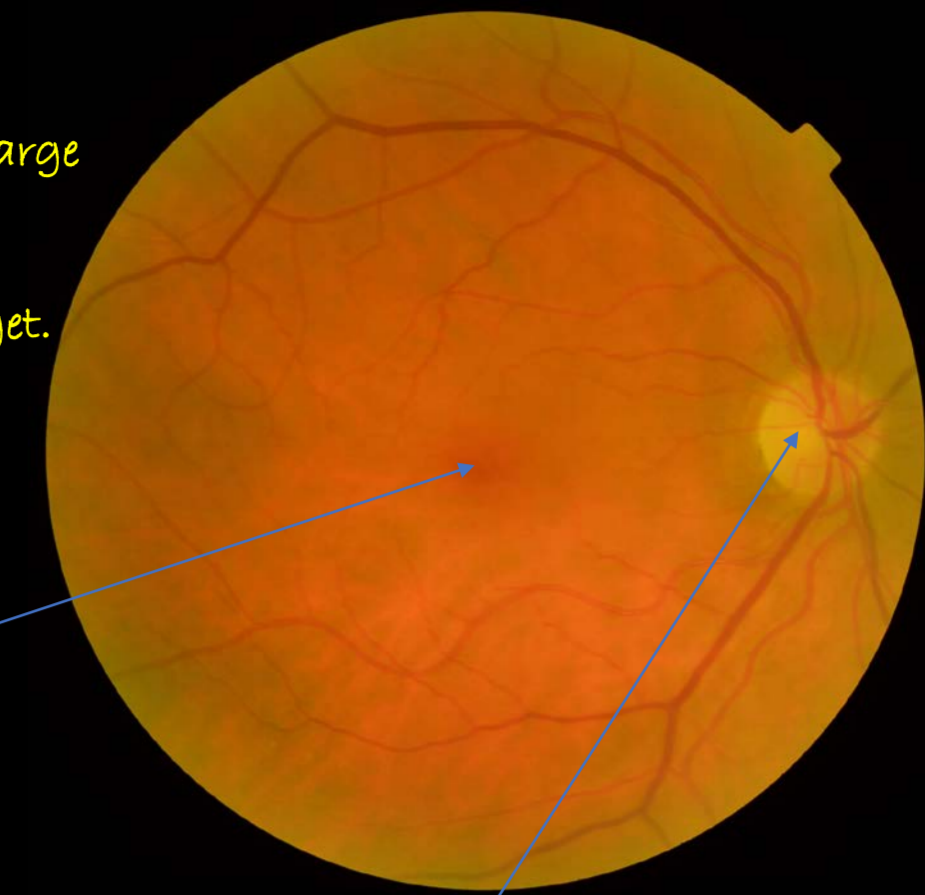


Due to fuzzy image fine vessels not visible on the surface of the disc

Also vessels not clearly visible within 1DD of the centre of the fovea

Answer

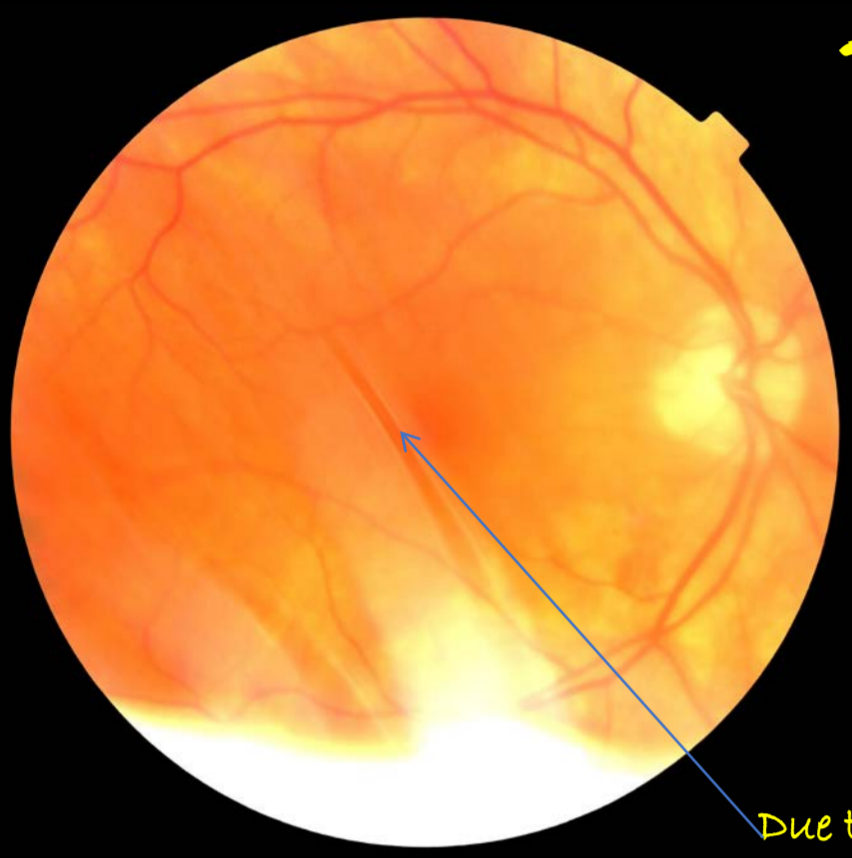
- Check image during and afterwards in large view
- Try to adjust focussing
- Move slightly to the side of the screen target.



Vessels now clearly visible within 1DD of the centre of the fovea

Fine vessels now visible on the surface of the disc

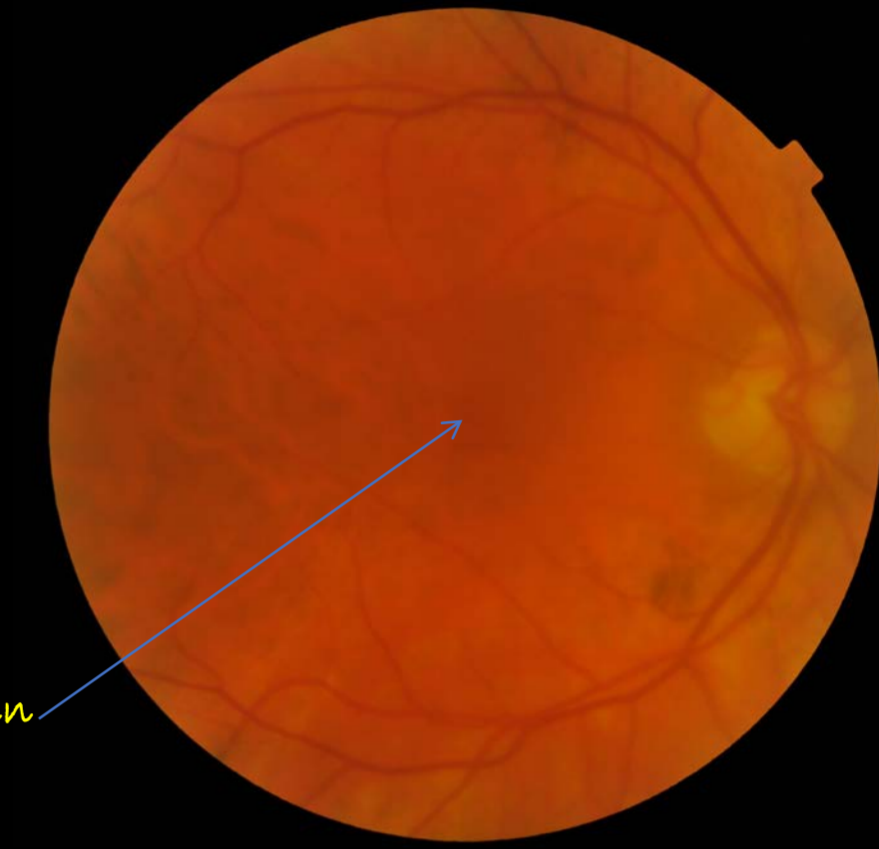
? How do you avoid eye lashes



Due to eye lashes vessels not clearly visible within 1DD of the centre of the fovea

Answer

- Relax patient
- Don't fluster patient
- Time your shot
- Make knock sound then press shutter
- Hold patients eyelid up
- Or get patient to hold eyelid up



Due to no eye lashes vessels clearly visible within 1DD of the centre of the fovea

? How do you avoid dark images

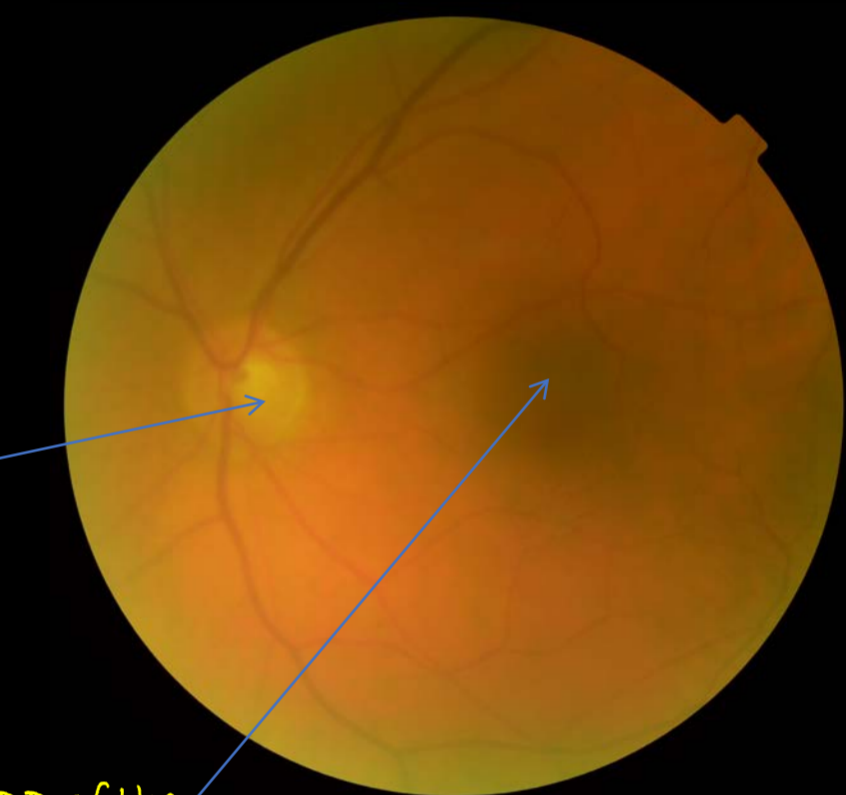


Due to dark image fine vessels not visible on the surface of the disc

Also vessels not clearly visible within 1DD of the centre of the fovea

Answer

- Use extra flash.
- Allow longer for dilation.
- Use small pupil setting
- If these do not work instill phenylephrine hydrochloride 2.5%



Fine vessels now visible on the surface of the disc

Vessels now clearly visible within 1DD of the centre of the fovea

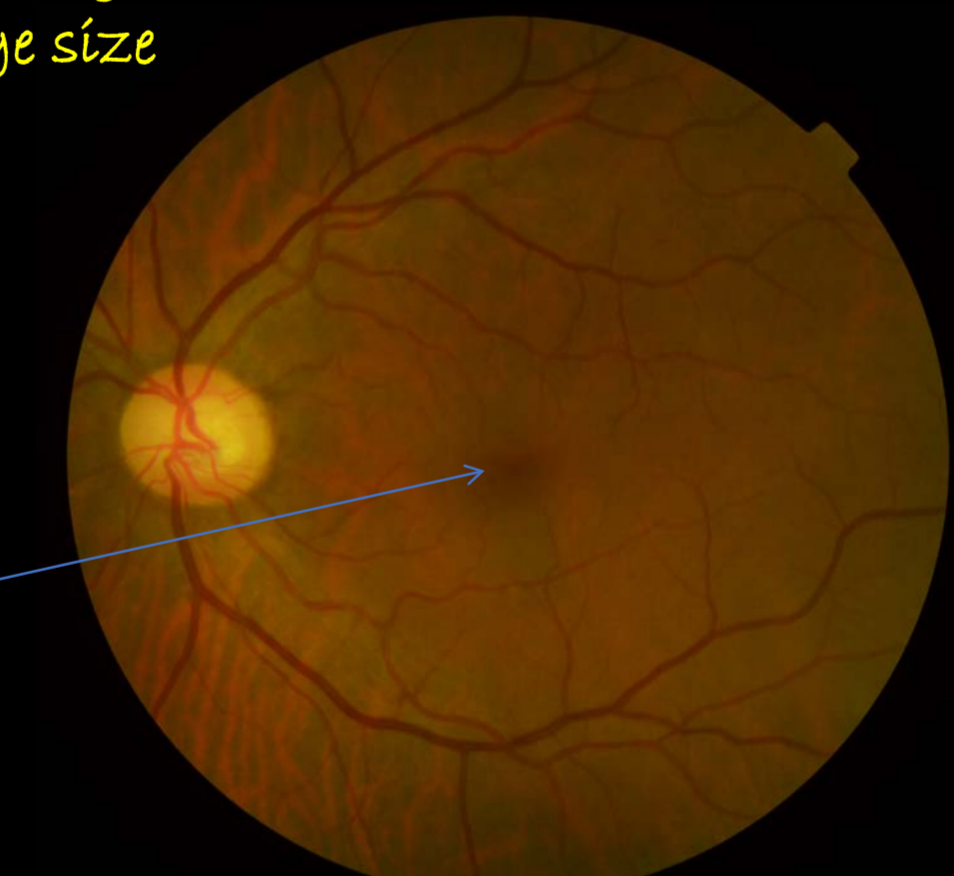
? How do you avoid marks on an image due to a dirty lens



Due to marks from dirty lens vessels not clearly visible within 1DD of the centre of the fovea

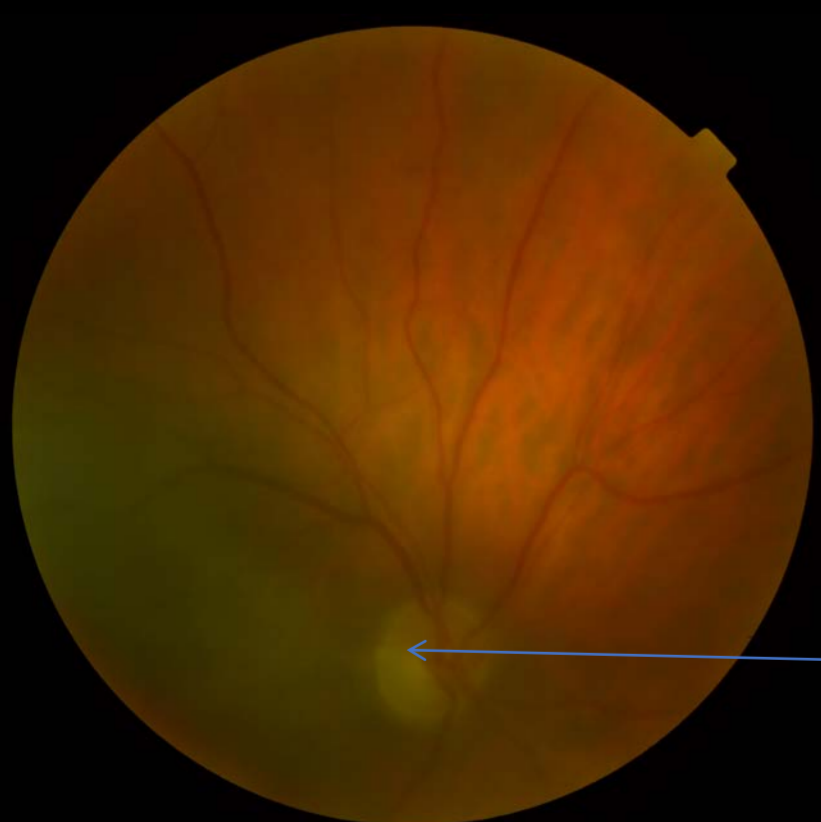
Answer

- Check images for dirty marks during and at end of photography in large size
- Clean lens immediately
- Retake images



Due to cleaning of the lens vessels now clearly visible within 1DD of the centre of the fovea

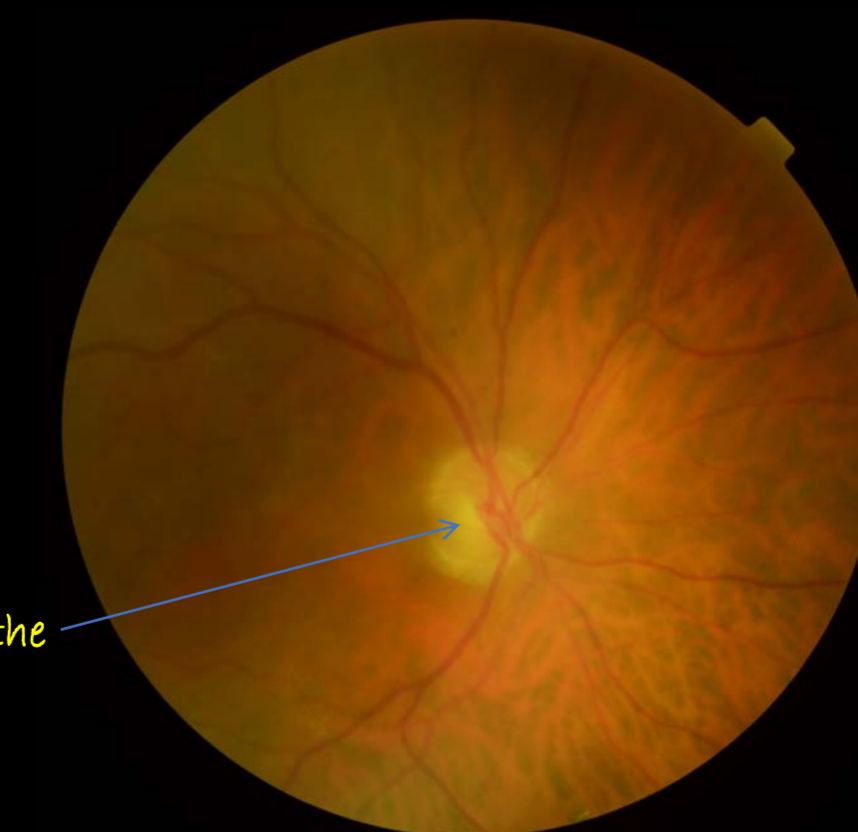
? How to avoid taking an inadequate image that does not meet NHS National Screening Standards



Due to the whole optic disc not being over 2DD from the edge this image does not meet NHS National Screening Standards

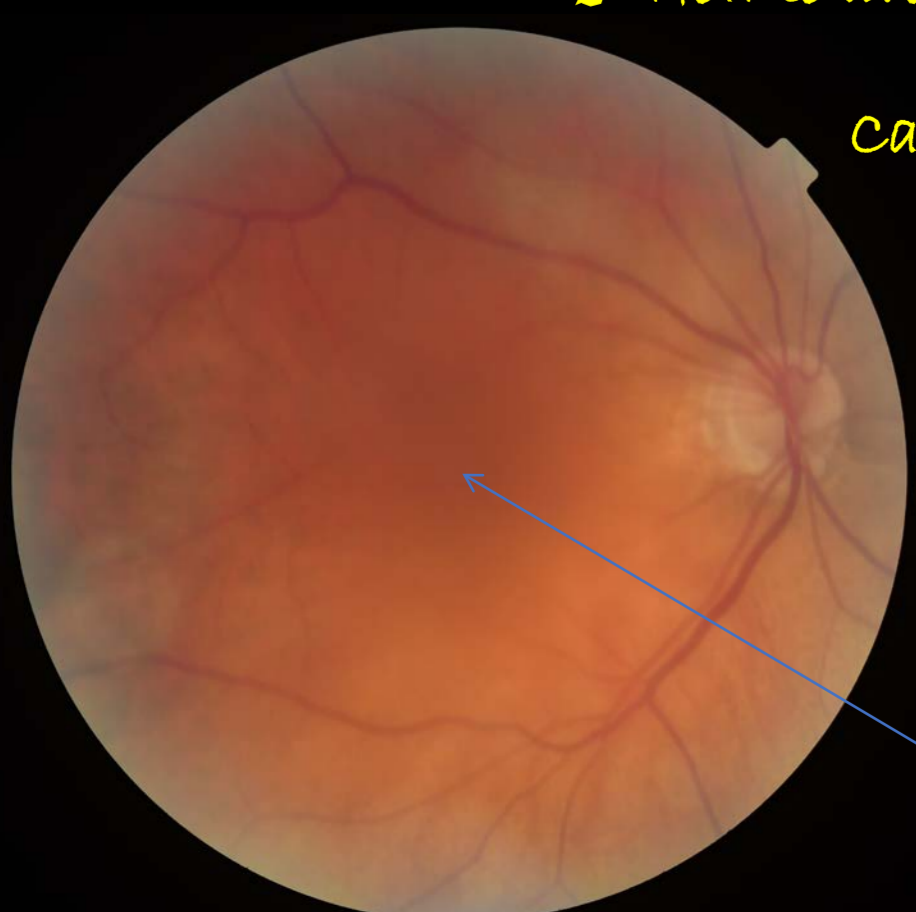
Answer

- Give clear explanation so patient looks in the correct direction.
- Check images during and at end of photography
- Retake images where needed,
- Use a different system when looking at the light doesn't work eg look at my ears, look at my voice etc...



Due to the whole optic disc being over 2DD from the edge this image does now meet NHS National Screening Standards

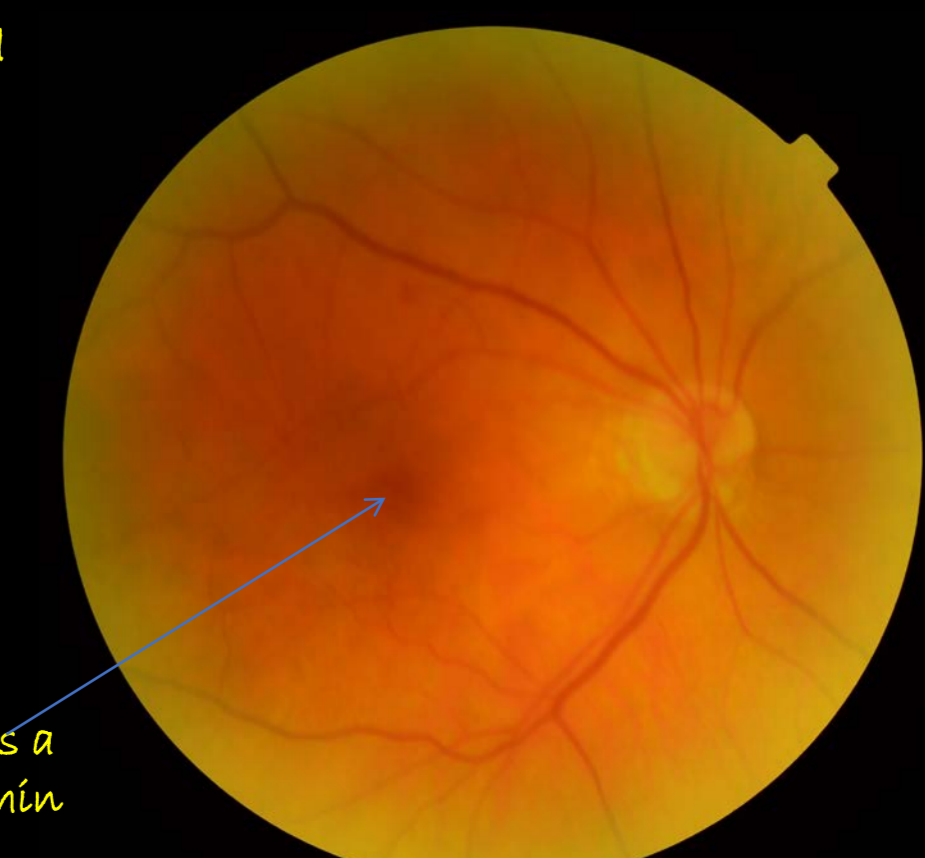
? How to avoid inadequate images due to conditions like Cataracts, Keratopathy and Asteroid Hyalosis



This is an example of a patient with a cataract and vessels not clearly visible within 1DD of the centre of the fovea

Answer

- Check images carefully in large view and
- Where needed take a central shot.



Due to taking a central shot even though there is a cataract, the vessels are now clearly visible within 1DD of the centre of the fovea