

Second Eyes Post-Cataract-op Care

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Criteria for cataract surgery

- In general:
 - Higher expectations
 - Higher refractive demand
 - The elusion that cataract surgery is a walk in the park!

Criteria for cataract surgery - GNHST

- GCAQ >10
- Anisometropia of >2D

GLoucestershire CATARACT ASSESSMENT QUESTIONNAIRE

Name of Patient:
 Date:
 Address:
 District:
 Postcode:

Operative Eye:

Section 1: VISUAL ACUITY SCORE

VA	6/9	6/12	6/18	6/24	6/36	6/60	6/90	6/180	6/360
6/9	2	4	6	7	8	9	10		
6/12		4	8	10	11	12	14		
6/18			6	10	12	14	16		
6/24				11	15	17	19		
6/36					17	21	23		
6/60						23	25		
6/90							25		
6/180								25	
6/360									25

Max points 40

Section 2: CLINICAL WOOFERS

If BCVA is better than 6/24 in eye to be operated on, add 5 points if a cataract is present: Max points 5

If there is other ocular pathology reducing the visual acuity and there is no primary cataract present: Max points 5

Section 3: SEVERITY OF VISUAL IMPAIRMENT

A. Does the patient have any difficulty, even with glasses, recognising faces, watching TV, reading, driving, etc?
 POINTS: No difficulty 1 Some difficulty 2 Very difficult 3

B. Is the patient's ability to work, give care or live independently affected?
 POINTS: No difficulty 1 Some difficulty 2 Very difficult 3

C. Driving / Mobility
 POINTS: No difficulty 1 Some difficulty 2 Very difficult 3

D. TOTAL SCORE

Suitability for Optometry Fast Track

- Uncomplicated Sx
- With co-pathology but consultant deems suitable for fast track
- DR with ROM0 or R1M0

Post op Independence Day



The Visit

- 4-6/52 post-op
- Post operative history and symptoms
 - Pain/Discomfort/Redness/Photophobia/Discharge
 - Flashing Lights/Floaters
 - Compliance with drops and if course completed
 - Satisfaction with surgery & vision
 - Co-existing eye problems e.g. Glaucoma
 - Driving, VDU use and occupational status
 - Current spectacles and their suitability
 - Spectacle requirements

The Visit

○ Refraction including

- Focimetry of spectacles (if not previously recorded)
- Unaided vision of both eyes
- Retinoscopy and subjective refraction, best corrected visual acuity (BCVA) including comment on refractive outcome, anisometropia and tolerance
- Near addition, including a test of tolerance to vertical prism imbalance, if necessary
- Binocular vision assessment

The Visit

○ Anterior eye Slit Lamp examination: The following should be assessed

- Eyelids
- Conjunctiva and sclera for signs of hyperaemia
- Cornea for oedema/striae/folds and staining, including Seidel's sign on fluorescein application
- Anterior chamber to assess depth, check for retained lens matter and grade any inflammatory activity
- Iris for trans-illumination, pupil irregularities or evidence of damage during surgery
- Lens, in pseudophakic eyes checking for deposits, posterior capsule opacification and centration and in phakic eyes, grading cataract type and severity
- Intra-ocular pressure: Goldmann applanation tonometry

Protocol

Nurse cataract follow-up 14/06/2016 - R phaco + IOL on 21/03/2016 2nd post-op visit 85 days post-op

Clinical details | Protocols | Outcomes | Observations | Admin |

Examination		Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	Raised IOP (>21 mmHg)	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Corneal oedema / striae / Descemet's folds	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Corneal epithelial staining	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Leaking wound (Seidel +ve)	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Shallow AC	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Marked limbal / conjunctival injection	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Post-operative uveitis	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Vitreous to the section	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	IOL decentred	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Posterior capsule opacification	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	New floaters since surgery	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Referred back to hospital eye service	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Patient perceived improvement in vision	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Is the eye comfortable	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Has the patient completed post op drop regime	<input type="checkbox"/>

Comments

[View cumulative complications](#)

What do NPs look for?

- The op is straight forward
- Pt is happy with results
- No visual co-morbidities
- No-post op complications

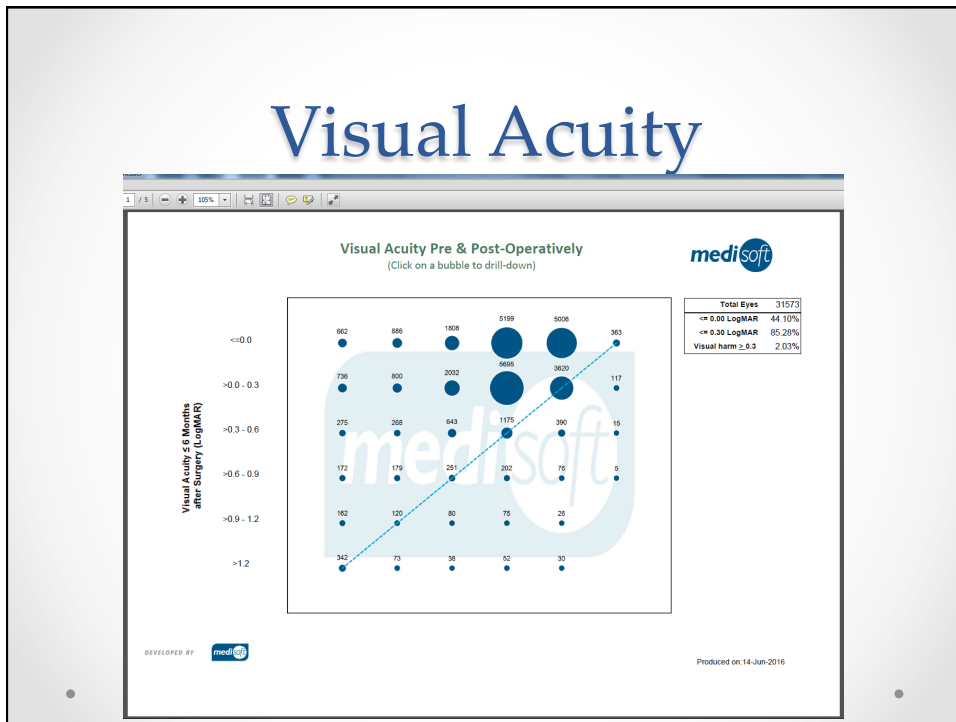
Complications

- Optical
- Surgical
- Medical

Optical Outcome

- The visual performance of the eye may be characterised in five major areas:
 - High contrast acuity (e.g. Snellen)
 - Contrast sensitivity
 - Glare disability
 - Visual field
 - Colour vision

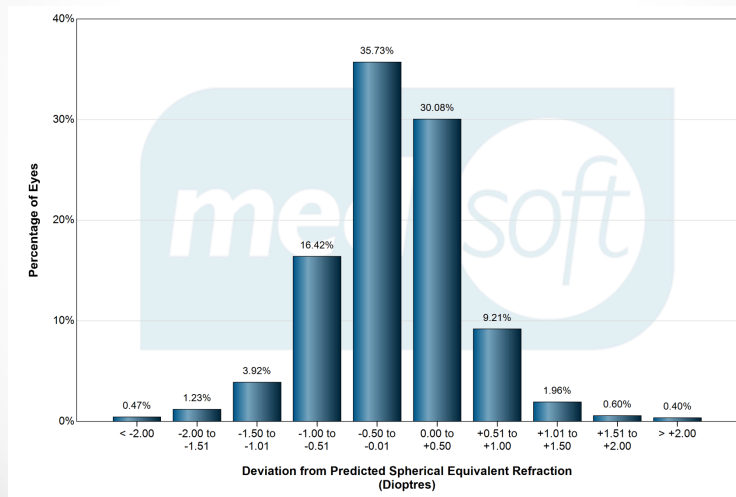
Visual Acuity



Optical Outcome

- Surprise refractive outcome:
 - RCOphth guidelines: +/- 1D in 85%

Deviation from Predicted Spherical Equivalent Refraction



Optical Complication

- Management
 - Laser Refractive Surgery
 - Piggyback IOL



Wound leak

- Reduced VA
- Shallow AC
- Low IOP
- Seidel +ve

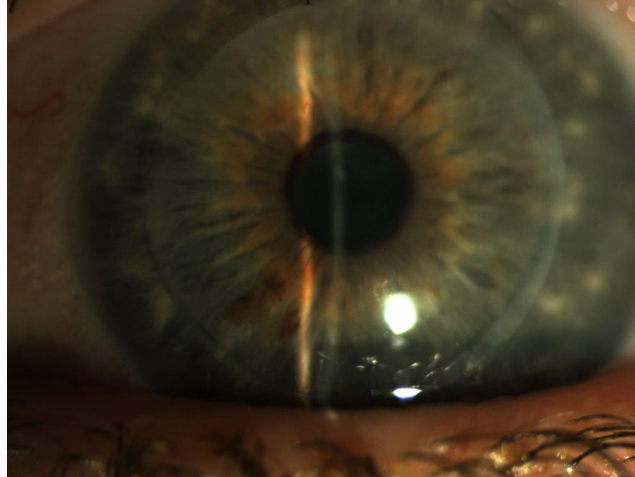
Send to hospital?

Corneal Oedema & Dec Folds

- 0.3%
- Pre-existing guttata
- Too much phaco/ultrasound power (hard cataract)

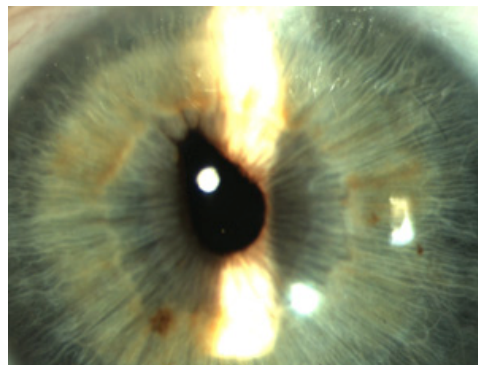
When to send to HES?

- If cornea oedema is severe so please send to HES
- If only Dec folds, this should resolve on its own

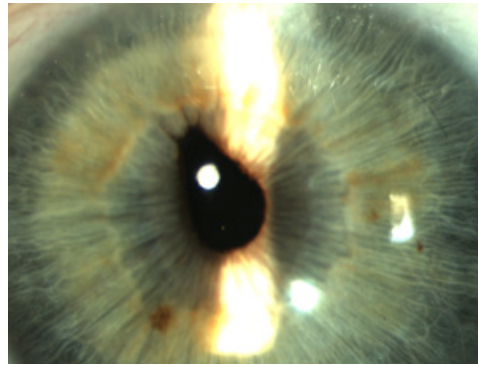


• We can fix it! •

Vitreous Wick



Vitreous Wick



Send to hospital if:

- Leaking
- Hypotony
- CMO

Retained Lens Fragment in AC

- Inflammation
- ↑ IOP
- CMO



Send to Hospital

Post-op Uveitis

Biomicroscope examination / findings	Patient symptoms	Action / treatment	Review arrangements
Mild uveitis Cells + Flare +	Asymptomatic	No treatment required	Patient to contact dept if develops symptoms
Mild uveitis Cells + Flare + Minimal corneal oedema ie 2-3 striae	Symptomatic and has one or more of the following: Red eye Photophobia	Prescribe one drop of maxidex to the affected eye: twice a day for 1 week once a day for 1 week then stop (PGD required)	No review necessary unless symptoms are not resolving – patient to contact for f/u appt if required
Moderate uveitis Cells ++ Flare ++ Corneal oedema – descemets folds	Symptomatic and has one or more of the following: Red eye Photophobia Small reduction in VA - no more that 2 lines snellen below expected visual outcome	Optometrist must seek ophthalmology opinion	Review to be arranged in the ophthalmology clinic same day
Severe uveitis Cells +++ Flare +++ And/or corneal oedema with loss of transparency Or IOP > 21mmHg	Symptomatic and has one or more of the following: Red eye Photophobia Significant reduction in VA - more that 2 lines snellen below expected visual outcome	Optometrist must seek ophthalmology opinion	<u>Urgent</u> review to be arranged in the ophthalmology clinic same day
Hypopyon	Regardless of symptoms	Optometrist must make <u>immediate</u> referral to ophthalmology clinic	Optometry: March 2008 Patient <u>must</u> be seen by an ophthalmologist urgently

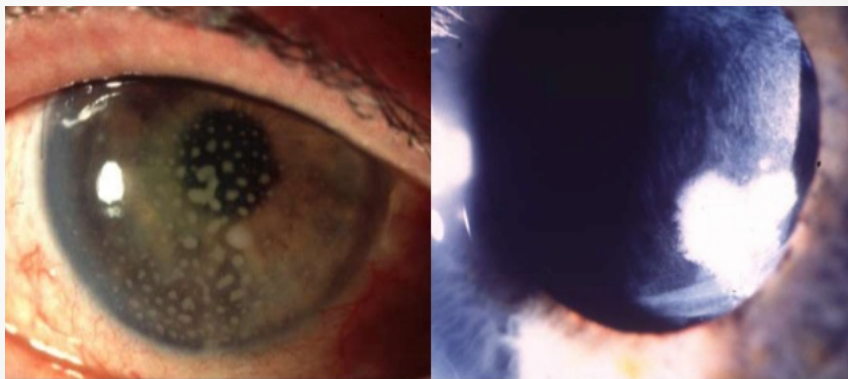
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Endophthalmitis

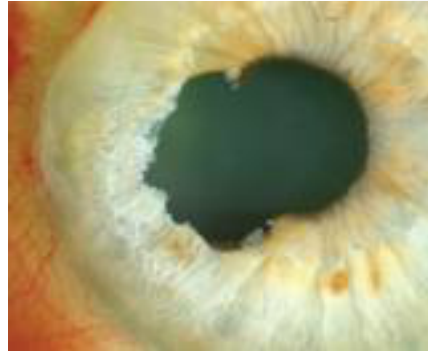
- The national rate reported in the 2000 BOSU study²³ was 0.14%,
 - We had 3 cases between April 2014 and Dec 2015 (around 0.04%)
- w/in 6/52
- Chronic Endophthalmitis:
 - *Propionibacterium acnes*

Propionibacterium Acnes Endophthalmitis



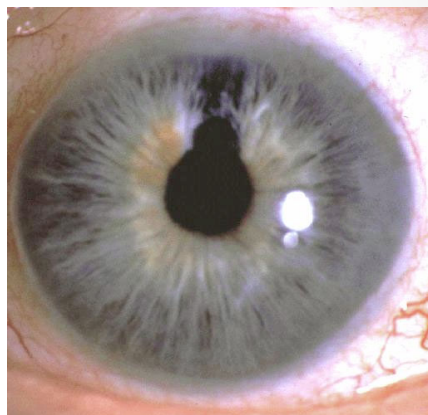
Iris Damage

- Higher incidence since Tamsulosin (Floppy Iris Syndrome)



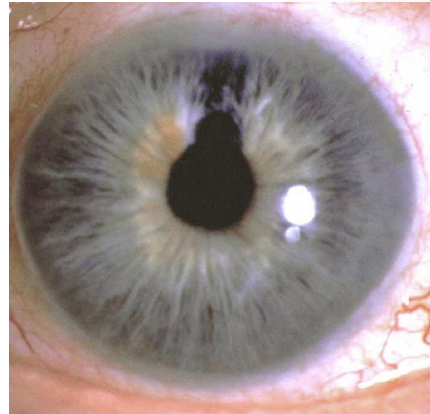
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Iris Damage

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PC Tear

- Typically managed in HES
 - Duty of Candour: by law surgeon needs to see the patient if there was any harm done e.g. PC tear.
 - These patients are usually managed in HES and only seen in community if PC tear is very small and there was no vit prolapse and IOL in the sulcus

PC Tear

- IOL can sink through PC tear to the vitreous

PCO

- Early PCO/ SLM left behind:
 - To Yag or not to Yag?

PCO

- Early PCO/ SLM left behind:
 - To Yag or not to Yag
 - When?

PCO

- Yag damage to IOL
 - IOL pitting
- No need to send to HES if mild and

Phimosis

- Thickening of anterior capsule:
 - Less common than PCO
 - More common in young patients
 - Could be visually insignificant and not needing treatment
 - If visually significant it will need yag anterior capsulotomy

A Crack in IOL

- A small crack on the IOL
 - Usually visually not important
 - Is it worth extracting and putting a new IOL in? probably not
 - Refer only if symptomatic

Dislocated IOL

- Zonular dehiscence
- Haptic not in the bag
- PC tear

Send to HES

Flashes and Floaters

- 0.9% post phaco
- Increases in case of complication:
 - PC tear & anterior vity
 - Vitreous wick

Cystoid Macular Oedema

- In cases of unexplained reduced vision
- Fundoscopy shows cystic spaces in the macula
- OCT might detect sub-clinical CMO
- Increased risk of CMO with DM, therefore it's a protocol in our department to give Nevenac to all our diabetic patients undergoing Cataract op

Patient Reported Outcomes (PROMs)

- Used to judge the morbidity and treatment benefits of cataract surgery
- Subgroup analysis of 10,675 patients using 'Catquest' within the Swedish National Register:
 - 84% of patients perceived a benefit from surgery
 - 7% perceived no change
 - 9% reported increased difficulty in performing daily life activities 6 months after surgery

NOD

- We need to collect post op data and marry to pre-op data
- Remote input into Medisoft

Closing the loop

- Webstar
- The need to close the loop at the point of last test
 - Evesham model not viable for large scale
- The need for remote log-in on Medisoft
 - Cost ? £2/ patient
- Clinical governance

Audit

- Responsibility
 - ?PEG
 - ?LOC
 - ?HES

Potential pitfalls

- Accountability
 - In HES it's the consultant's responsibility to review the notes and make the final decision
 - Now?