



SHARED CARE CATARACT SCHEME
Moorfields @ Bedford

Guidelines and Pathway for Optometrists

This scheme allows accredited optometrists to assess patients with cataract in the community, and refer those who are visually disabled by cataract directly to Moorfields at Bedford Hospital.

The patient must have significant cataract affecting their vision and daily life and the patient must want surgery in compliance with the PCT clinical thresholds. They must also be registered with a GP in Bedfordshire.

PCT Clinical thresholds for elective cataract surgery

1. Reduced visual acuity documented to be at least 6/9 or worse in the affected eye
2. **AND** Impairment of lifestyle such as:
 - The patient is at significant risk of falls
 - **OR** the patient's vision is affecting their ability to drive
 - **OR** the patient's vision is substantially affecting their ability to work
 - **OR** the patient's vision is substantially affecting their ability to undertake leisure activities such as reading, watching television or recognising faces
3. **AND** willingness to have cataract surgery

The accredited optometrist will undertake a pre-operative assessment, working to a specific protocol. The aim of the pre-operative assessment is to:

- Diagnose the cataract and ensure that the patient wants surgery
- Counsel the patient with verbal and written information about cataract surgery
- Identify any ocular co-morbidity that may limit the visual outcome of surgery
- Identify factors in the patient's medical, psychological or ocular state that may interfere with the ability to operate safely or to operate under local anaesthetic (See Appendix 1)
- If relevant, discuss refractive outcome eg if myopic, do they wish to retain some myopia

Referral is via a standard form and will be screened by a hospital optometrist in order to identify any patients who may require an ophthalmologist's examination prior to surgery (See Appendix 2).

Patients will attend a nurse-led pre-operative assessment clinic shortly before the date of surgery, during which there will be a general health assessment, biometry will be performed and informed consent obtained.

The patient will meet the surgeon on the day of the surgery. The surgeon will check all the details, examine the patient and answer any final questions.

Following surgery, the patient will leave with an advice sheet, drops and emergency contact numbers.

All patients with no complications will attend an accredited optometrist for a post-operative assessment at 4 weeks. If there are any complications during surgery, the patient will be examined at the hospital clinic, timing to be determined by the surgeon.

Some patients may need attendances in addition to their post-operative attendance at the accredited optometrist:

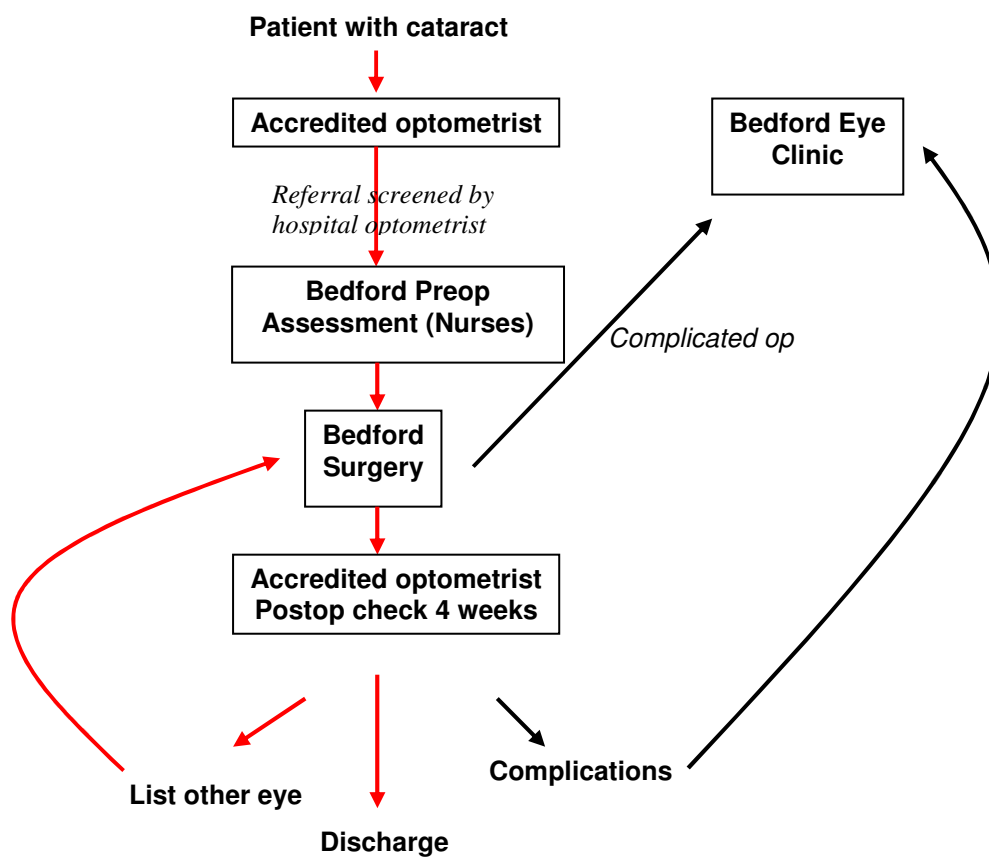
- If the patient has glaucoma they will be reviewed at the nurse-led clinic the next day / Monday if surgery on a Friday.
- Diabetic patients will be referred back to the Bedfordshire Diabetic Retinopathy Screening Service or will be reviewed in the hospital eye clinic depending on their retinal status.
- Patients with ocular co-morbidity may also require booked hospital follow-up at an appropriate time interval.

The accredited optometrist will undertake a post-operative assessment, working to a specific protocol. The aim of the post-operative assessment is to:

- Review patient's post-operative history and any symptoms
- Undertake refraction and assess acuity
- Assess for any post-operative complications (See Appendix 3)

The patient can then be referred for their second eye operation if required, or discharged by the accredited optometrist.

Shared Care Cataract Pathway



PRE-OPERATIVE ASSESSMENT

History and Symptoms

What is the presenting complaint?

General History

Occupation/Driver
Social (Living) status

Visual Symptoms

General blur/reduced vision
Glare
Difficulty reading or other specific tasks
Difficulty with mobility (steps/kerbs etc)

Ocular History

Amblyopia/strabismus
Glaucoma
Diabetic Retinopathy
Previous Ocular surgery/LASER etc.

Medical History/Allergies

Hypertension, ischaemic heart disease, stroke
Diabetes
COAD/Asthma
Neck/back problems
Severe mental/psychiatric problems
Allergies to any medication etc.
Hearing impairment/ language difficulties

Medication

Warfarin, steroids, insulin, asthma inhalers, alpha blockers (Tamsulosin, Doxazosin, Flomax)

Refraction

Previous refraction (and visual acuity if available). Date of previous Rx
Present refraction and BCVA (Distance and near with appropriate add)
PH if necessary

Ocular Assessment

Pupil responses (Inc RAPD)

Slit Lamp Examination of Anterior Segment

Eye Lids (e.g. blepharitis, entropion, ectropion)
Cornea, including careful look for guttata/ endothelial changes
A/C Depth- Van Herick
Pupil (adhesions, shape)
Any other abnormalities (e.g. Pseudoexfoliation)

Intra-ocular pressure (& method used)

Dilated Fundus Examination

Pupil (degree of dilation)
Lens - Type and density of cataract (indicate if dense brown/white)

Optic Disc – CD ratio, pallor etc
Macula – signs of AMD
Fundus – any abnormalities

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Before Referral check:

Does the patient want cataract surgery?

- Only refer if they want surgery
- Reduced visual function caused by cataract must be interfering with daily activities in order to be considered for surgery
- Discuss risks and benefits of surgery

Identify potential problems for tolerating local anaesthetic surgery:

- Are they able to co-operate & communicate for local anaesthetic (lie flat & keep still for 30 mins etc)?
- Any problems with positioning (eg back, neck, breathing, cough)?
- Are there any significant communication/comprehension/anxiety concerns?

Patient information

- Offer choice
- Provide information leaflet
- Advise about referral process
- Ask patient to sign referral form (as an agreement to be listed for surgery)

To Refer for Surgery

Complete the Direct Referral for Cataract Surgery form

Send Hospital copy to:

Hospital Optometrist
Moorfields at Bedford Eye Unit
Bedford Hospital
Kempston Road
Bedford
MK42 9DJ

Send a copy to patient's GP with standard covering letter

Retain a copy for your own records.

POST-OPERATIVE ASSESSMENT (4 WEEKS)

History and Symptoms

Any significant problems/symptoms

Compliance with drops, they should have finished using the eye drops after 4 weeks

Perception of visual improvement

Refraction

Unaided Acuities

Refraction and BCVA (Distance and Near)

Slit Lamp examination

Degree of redness

Wound

Corneal clarity/oedema

Degree iritis/AC activity

IOL Position

Significant posterior capsule opacity

Pupil/Iris abnormalities

IOP

Fundoscopy

Refer for second eye if required

Please indicate in the space provided on the post-operative assessment form if patient needs date for 2nd eye.

To Return Post-Operative Assessment Form

A copy of the assessment form should be sent to:

Hospital Optometrist
Moorfields at Bedford Eye Unit
Bedford Hospital
Kempston Road
Bedford
MK42 9DJ

To Refer back to Eye Clinic

Patients should be referred back to the Eye Clinic if there are signs of undiagnosed pathology or unexpected abnormalities. Anything other than emergency or urgent referrals can be referred using the post-op assessment form.

Emergency	Suspected endophthalmitis
Urgent	Retinal detachment/retinal tear/flushes and floaters Wound closure problems IOP>40mmHg
Soon	Marked iritis IOP>28mmHg Corneal oedema Unexpected IOL displacement Persistent mild/moderate iritis Severe Diabetic retinopathy Drop allergy
Routine	Significant symptomatic PCO Cystoid macular oedema Refractive surprise Suspected glaucoma Patient not happy with outcome

For urgent enquiries:

Office hours please contact Acute Clinic at Moorfields at Bedford on 01234 792643 or fax a referral on 01234 735914

Out of hours contact Luton and Dunstable on-call ophthalmologist on 01582 491122

Appendix 1: Relevant preoperative factors to be identified

Factors that may interfere with the patient keeping still or lying flat or tolerating a local anaesthetic

- Anxiety, dementia, severe deafness, comprehension problems, communication problems, claustrophobia
- Cough, breathing problems/chest disease (eg asthma, chronic bronchitis), severe heart disease, neck stiffness, spinal curvature (Ask patient can you lie flat and still for 30 mins?)
- Young patients (<50 years)
- Patient requests general anaesthesia

Factors we need to be aware of before booking on topical anaesthetic list

- On Alpha Blockers
- Lid squeezers

Medical factors that may make it unsafe or difficult to perform surgery

- Severe angina, severe chest disease, uncontrolled diabetes, uncontrolled hypertension
- On warfarin
- Any active infection (eg leg ulcer)

Conditions of the eye that may limit the visual outcome

- Glaucoma
- Age-related macular degeneration
- Diabetic retinopathy
- Previous retinal detachment
- Amblyopia
- Optic atrophy
- Dense cataract precluding visualisation of the fundus

Conditions of the eye that may interfere with the ability to do the operation safely

- Blepharitis
- Corneal opacities
- Corneal guttatae or Fuch's endothelial dystrophy
- Shallow anterior chamber
- Pseudoexfoliation
- Poorly dilating pupil
- White cataract
- Very dense brown nuclear cataract
- High myopia or hypermetropia

Appendix 2: Criteria for review in hospital eye clinic

- High myopia
- High hypermetropia
- Previous refractive surgery or laser
- Previous retinal detachment surgery
- Significant corneal disease or scarring
- Eye lid problems eg entropion, ectropion, trichiasis, severe blepharitis, marked epiphora
- Other serious or undiagnosed ocular pathology eg uncontrolled glaucoma, marked macular degeneration etc
- Dense or white cataract
- Unclear what anaesthetic required from information provided
- Other complicating factors at discretion of optometrist

Appendix 3: Post-operative problems requiring referral to hospital

Endophthalmitis

Refer: Emergency- immediate

Infection inside the globe.

Presents as painful, red eye with poor vision. Severe iritis usually with hypopyon.

Opaque vitreous with poor view of fundus

Marked iritis

Refer: Urgent- fax letter same day

Uncomfortable and slight blurring of vision

Ciliary injection, marked cells and flare

Sometimes a problem as tapering drops

Can be start of endophthalmitis

Significant Wound Closure Problems

Refer: Urgent-fax letter same day

May be asymptomatic.

Wound edges may not seal together which presents as a wound gape, a wound plugged with prolapsed iris tissue, or may be Seidel test +ve.

If severe leakage from eye, IOP will be low and AC shallow.

Retinal detachment and retinal tear

Refer: Urgent-fax letter same day

Presents as flashes and floaters, and possibly visual field loss or reduction in acuity (if retina detached).

Maybe a PVD, but need referring if shortly after cataract surgery

Higher risk in high myopes, and those with serious operative complications.

Raised IOP

Refer IOP>40mmHg Urgent

Refer IOP>28mmHg Soon

Usually occurs in first few days following surgery, but can persist longer. If severe may be associated with reduced acuity and corneal oedema.

Corneal oedema

Refer: Soon

Presents as blurred vision and corneal opacity with sometimes visibly increased corneal thickness and Descemet's membrane folds. Mild corneal oedema is common in first few weeks following surgery. Usually resolves over time.

Must ensure not caused by raised IOP.

Rarely does not recover and requires corneal graft.

Drop allergy

Refer: Soon

Presents as sore, itchy red eye +/- skin rash on lids

IOL displacement

Refer: Soon

Presents as reduced vision, increased astigmatism and monocular diplopia.

IOL may be partially or completely displaced from central position across the pupil (up/down or occasionally forwards/backwards). May see part of the IOL in front of pupil/iris, or iris trapped behind part of IOL. Pupil may be distorted.

More obvious with dilated pupil

Cystoid macular oedema

Refer: Routine

Presents as blurred vision, usually delayed onset after surgery.

VA reduced, may be Amsler distortion, and swelling or cysts visible at macula. More common in diabetic, even if no retinopathy.

Deteriorating diabetic retinopathy

Refer: Severe DR -Soon

Diabetic retinopathy can sometimes deteriorate rapidly after surgery, even to the point of frank maculopathy or new vessels requiring laser treatment.

Posterior capsular opacification

Refer: Routine

The commonest complication, causes reduction in vision and loss of transparency behind the IOL. Usually occurs after several months – years, but occasionally occurs early. Can be treated with simple laser therapy if significant symptoms and opacity.

All patients being discharged from care should be warned of the possibility of this complication

Refractive surprise

Refer: Routine

Patient's refraction does not match the predicted outcome, or there is significant unplanned anisometropia. Anisometropia in between surgery for first and second eye is common,

Also refer back

- Painful eyes
- Persistent red eye
- Unexplained reduced visual acuity (ie if not known AMD, amblyopia, or other such disorder limiting vision in predicted manner)
- Diplopia
- Other complications or unexpected findings
- Any patient unhappy with vision/care/outcome