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# Cataracts in adults: management

## NICE guideline: short version

### Draft for consultation, May 2017

This guideline covers managing cataracts in adults aged 18 and over. It aims to improve care before, during and after cataract surgery by optimising service organisation, referral and surgical management, and reducing complications. It further aims to improve the availability of information for people with cataracts before, during and after cataract surgery.

#### Who is it for?

- Healthcare professionals
- Commissioners and providers
- People with cataracts and their families and carers

This version of the guideline contains the draft recommendations, context and recommendations for research. Information about how the guideline was developed is on the [guideline's page](#) on the NICE website. This includes the guideline committee's discussion and the evidence reviews (in the [full guideline](#)), the scope, and details of the committee and any declarations of interest.

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## 7 **Recommendations**

People have the right to be involved in discussions and make informed decisions about their care, as described in [your care](#).

[Making decisions using NICE guidelines](#) explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

### 8 **1.1 Patient information**

9 1.1.1 Give people with cataracts, and their family members or carers (as  
10 appropriate), both oral and written information. Information should be  
11 tailored to the person's needs, for example, in an accessible format. For  
12 more guidance on giving information to people and discussing their  
13 preferences, see the NICE guideline on [patient experience in adult NHS](#)  
14 [services](#), particularly recommendations 1.2.12 and 1.2.13 on capacity and  
15 consent<sup>1</sup>.

#### 16 **At referral for cataract surgery**

17 1.1.2 At referral for cataract surgery (also see section 1.2), give people  
18 information about:

- 19 • cataracts:

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<sup>1</sup> The NICE guideline on dementia is being updated, and is due to be published in summer 2018. The [dementia guideline update](#) will cover managing comorbidities (including ocular comorbidities) in people living with dementia.

- 1           – what cataracts are
- 2           – how they can affect vision
- 3           – how they can affect quality of life
- 4           • cataract surgery:
  - 5           – what it involves and how long it takes
  - 6           – possible risks and benefits
  - 7           – what support might be needed after surgery
  - 8           – likely recovery time
  - 9           – how vision and quality of life may be affected without surgery.

## 10 **Before cataract surgery**

11 1.1.3      At the preoperative outpatient appointment, review and expand on the  
12            topics in recommendation 1.1.2, and give people information about:

- 13           • the refractive implications of different intraocular lenses (see  
14            recommendation 1.5.3)
- 15           • types of anaesthesia
- 16           • the person's individual risk of complications during or after surgery (for  
17            example, the risk of postoperative retinal detachment in people with  
18            high myopia; also see recommendations 1.3.10 and 1.3.11)
- 19           • what to do and what to expect on the day of cataract surgery
- 20           • what to do and what to expect after cataract surgery
- 21           • what support might be needed after surgery
- 22           • medicines after surgery (for example, eye drops) and medicines that  
23            people may be already taking (for example, anticoagulants).
- 24           • the refractive implications after previous corneal refractive surgery, if  
25            appropriate (see recommendation 1.3.6)
- 26           • bilateral simultaneous cataract surgery, if appropriate (also see  
27            recommendations 1.6.3 and 1.6.4)

## 28 **On the day of cataract surgery**

29 1.1.4      On the day of surgery, before the operation, give people information  
30            about:

- 1           • their position on the list  
2           • what to expect during and after surgery.
- 3   1.1.5    On the day of surgery, after the operation, give people information about:
- 4           • what visual changes to expect  
5           • signs and symptoms of potential complications to look out for  
6           • any restrictions on activities, for example, driving  
7           • possible problems and who to contact  
8           • emergency situations and who to contact  
9           • eye drops  
10          • pain management  
11          • their next appointment and who they will see.

## 12   **After cataract surgery**

- 13   1.1.6    At the first appointment after cataract surgery, give people information  
14          about:
- 15          • eye drops  
16          • what to do if their vision changes  
17          • who to contact if they have concerns or queries  
18          • when it is appropriate to get new spectacles and how to do so  
19          • second-eye cataract surgery if there is a cataract in the non-operated  
20          eye  
21          • arrangements for managing ocular comorbidities.

## 22   **1.2    Referral for cataract surgery**

- 23   1.2.1    Base the decision to refer a person with a cataract for surgery on a  
24          discussion with them (and their family members or carers, as appropriate)  
25          that includes:
- 26          • how the cataract affects the person's vision and quality of life  
27          • whether 1 or both eyes are affected  
28          • what cataract surgery involves, including possible risks and benefits

- 1           • how the person's quality of life may be affected if they choose not to  
2           have cataract surgery  
3           • whether the person wants to have cataract surgery.

4   1.2.2   Do not restrict access to cataract surgery on the basis of visual acuity.

### 5   **1.3        *Preoperative assessment and biometry***

#### 6   **Biometry techniques**

7   1.3.1   Use optical biometry to measure the axial length of the eye for people  
8           having cataract surgery.

9   1.3.2   Use ultrasound biometry if optical biometry does not give accurate  
10          measurements.

11  1.3.3   Use keratometry to measure the curvature of the cornea for people having  
12          cataract surgery.

13  1.3.4   Consider corneal topography for people having cataract surgery:

- 14           • who have abnormally flat or steep corneas  
15           • who have irregular corneas  
16           • who have significant astigmatism  
17           • who have had previous corneal refractive surgery **or**  
18           • if it is not possible to get an accurate keratometry measurement.

#### 19  **Biometry formulas**

20  1.3.5   For people who have not had previous corneal refractive surgery, use one  
21          of the following to calculate the intraocular lens power before cataract  
22          surgery:

- 23           • If the axial length is less than 22.00 mm, use Haigis or Hoffer Q.  
24           • If the axial length is between 22.00 and 26.00 mm, use Barrett  
25            Universal II if it is installed on the biometry device and does not need  
26            the results to be transcribed by hand. Use SRK/T if not.  
27           • If the axial length is more than 26.00 mm, use Haigis or SRK/T.

1 1.3.6 Advise people who have had previous corneal refractive surgery that  
2 refractive outcomes after cataract surgery are difficult to predict, and that  
3 they may need further surgery if they do not want to wear spectacles for  
4 distance vision.

5 1.3.7 If people have had previous corneal refractive surgery, adjust for the  
6 altered relationship between the anterior and posterior corneal curvature.  
7 Do not use standard biometry techniques or historical data alone.

8 1.3.8 Surgeons should think about modifying a manufacturer's recommended  
9 intraocular lens constant, guided by learning gained from their previous  
10 deviations from predicted refractive outcomes.

### 11 **Second-eye prediction**

12 1.3.9 Consider using 50% of the first eye prediction error in observed refractive  
13 outcome to guide calculations for the intraocular lens power for second-  
14 eye cataract surgery.

### 15 **Risk stratification**

16 1.3.10 Consider using a validated risk stratification algorithm for people who  
17 have been referred for cataract surgery, to identify people at increased  
18 risk of complications during and after surgery.

19 1.3.11 Explain the results of the risk stratification to the person, and discuss how  
20 it may affect their decisions.

21 1.3.12 To minimise the risk of complications during and after surgery, ensure that  
22 surgeons in training are closely supervised when they perform cataract  
23 surgery in:

- 24 • people who are at high risk of complications **or**
- 25 • people for whom the impact of complications would be especially  
26 severe (for example, people with only 1 functional eye).

27 1.3.13 Explain to people who are at risk of developing a dense cataract that there  
28 is an increased risk of complications if surgery is delayed and the cataract  
29 becomes more dense.

1    **1.4        *Intraocular lens selection***

2    1.4.1     Offer square-edged hydrophobic acrylic or silicone intraocular lenses to  
3             people having cataract surgery, to reduce the risk of posterior capsule  
4             opacification.

5    1.4.2     Do not offer multifocal intraocular lenses for people having cataract  
6             surgery.

7    1.4.3     Offer monovision after cataract surgery to people who:

- 8             • are already using monovision **or**  
9             • have had a successful contact lens trial before cataract surgery.

10   1.4.4     Do not use blue-light filtering intraocular lenses in cataract surgery, unless  
11             as part of a research study.

12   **Addressing pre-existing astigmatism**

13   1.4.5     Consider on-axis surgery or limbal-relaxing incisions to reduce  
14             postoperative astigmatism.

15   **1.5        *Wrong lens implant errors***

16   **Before cataract surgery**

17   1.5.1     Before the preoperative biometry assessment, ensure that the person's  
18             correct medical notes are used by confirming the person's:

- 19             • name  
20             • address **and**  
21             • date of birth.

22   1.5.2     Immediately after the preoperative biometry assessment:

- 23             • securely fix the printed biometry results to the person's medical notes  
24             • check that the results include the person's name, address, date of birth  
25             and hospital number  
26             • use electronic data transfer if uploading the results to an electronic  
27             health record

- 1           • do not transcribe the results by hand.

2   1.5.3    At the preoperative assessment:

- 3           • discuss the refractive implications of different intraocular lenses with  
4           the person  
5           • base the choice of intraocular lens on the person's chosen refractive  
6           outcome  
7           • record the discussion and the person's choices in their medical notes.

8   **On the day of cataract surgery**

9   1.5.4    The person's medical notes, including printed biometry results, must be  
10           available in theatre on the day of the cataract surgery.

11   1.5.5    Use a checklist based on the [World Health Organization \(WHO\) surgical  
12           safety checklist](#), modified to include the following cataract surgery checks,  
13           to ensure that:

- 14           • the person's identity has been confirmed and matches information in:  
15           – the consent form  
16           – the printed biometry results **and**  
17           – the person's medical notes  
18           • the eye to be operated on has been checked and clearly marked  
19           • there is only 1 intraocular lens in the theatre, that matches the person's  
20           selected lens type and prescription  
21           • at least 1 additional identical intraocular lens is in stock  
22           • alternative intraocular lenses are in stock in case the selected lens  
23           needs to be changed if there are complications during surgery  
24           • at least 2 members of the team, including the surgeon, have checked  
25           the appropriateness, accuracy and consistency of all:  
26           – formulas  
27           – calculations **and**  
28           – intraocular lens constants.



- 1 1.5.6 Before giving the person anaesthetic, ensure that:
- 2
- 3 • there is only 1 intraocular lens in the theatre, that matches the person's  
4 selected lens type and prescription
  - 5 • at least 1 additional identical intraocular lens is in stock
  - 6 • alternative intraocular lenses are in stock in case the selected lens  
7 needs to be changed if there are complications during surgery.

- 7 1.5.7 Immediately before the operation, the surgeon should:
- 8
- 9 • confirm the person's identity and ensure that the correct medical notes  
10 are being used, especially if using electronic patient records
  - 11 • refer to the printed biometry results, not to transcribed information in  
12 the person's medical notes
  - 13 • refer to the person's medical notes to check which refractive outcome  
14 they preferred
  - 15 • verify that the correct intraocular lens has been selected and is  
16 available in theatre.

## 16 Occurrence of wrong lens implant errors

- 17 1.5.8 If a wrong lens is implanted, refer to [NHS England's Never Events policy](#),  
18 and together with the whole multidisciplinary team:
- 19
- 20 • undertake a root-cause analysis to determine the reasons for the  
21 incident
  - 22 • establish strategies and implementation tools to stop it from happening  
23 again.

## 23 1.6 *Surgical timing and technique*

### 24 Laser-assisted cataract surgery

- 25 1.6.1 Do not use femtosecond laser-assisted cataract surgery unless it is part of  
26 a randomised controlled trial comparing femtosecond laser-assisted  
27 cataract surgery with ultrasound phacoemulsification.

1 **Bilateral surgery**

2 1.6.2 Offer second-eye cataract surgery using the same criteria as for the first  
3 eye surgery (see section 1.2 for referral for cataract surgery).

4 1.6.3 Consider bilateral simultaneous cataract surgery for people who are at low  
5 risk of complications during and after surgery.

6 1.6.4 Discuss the potential benefits and harms of bilateral simultaneous  
7 cataract surgery with people, which should include:

- 8
- 9 • the potential immediate visual improvement in both eyes
  - 10 • how it will not be possible to choose a different intraocular lens based  
11 on the outcome in the first eye
  - 12 • the risk of complications in both eyes during and after surgery that  
13 could cause long-term visual impairment
  - the likely need for additional support after the operation.

14 **1.7 Anaesthesia**

15 1.7.1 Offer sub-Tenon's or topical (with or without intracameral) anaesthesia for  
16 people having cataract surgery.

17 1.7.2 If both sub-Tenon's and topical (with or without intracameral) anaesthesia  
18 are contraindicated, consider peribulbar anaesthesia.

19 1.7.3 Do not offer retrobulbar anaesthesia for people having cataract surgery.

20 1.7.4 Consider sedation, administered by an experienced ophthalmic  
21 anaesthetist, as an adjunct to anaesthesia for people if, for example:

- 22
- 23 • they have high levels of anxiety
  - 24 • they have postural or musculoskeletal problems
  - surgery is expected to take longer than usual.

25 1.7.5 Consider hyaluronidase as an adjunct to sub-Tenon's anaesthesia,  
26 particularly if trying to stop the eye moving during surgery.

1 **1.8** ***Preventing and managing complications***

2 **Floppy iris syndrome**

3 1.8.1 Consider intracameral phenylephrine to increase pupil size in people at  
4 risk of floppy iris syndrome.

5 **Capsular tension rings**

6 1.8.2 Do not use capsular tension rings in routine, uncomplicated cataract  
7 surgery.

8 1.8.3 Consider using capsular tension rings for people with pseudoexfoliation.

9 **Endophthalmitis**

10 1.8.4 Use preoperative antiseptics in line with standard surgical practice.

11 1.8.5 Use intracameral cefuroxime during cataract surgery to prevent  
12 endophthalmitis.

13 1.8.6 Use commercially prepared or pharmacy-prepared intracameral antibiotic  
14 solutions to prevent dilution errors.

15 **Cystoid macular oedema**

16 1.8.7 Consider topical steroids in combination with NSAIDs:

- 17
- 18 • after cataract surgery for people at increased risk of cystoid macular  
19 oedema, for example, people with diabetes or uveitis
  - 20 • to manage cystoid macular oedema.

21 1.8.8 Offer topical steroids and/or non-steroidal anti-inflammatory drugs  
22 (NSAIDs) after cataract surgery to prevent inflammation and cystoid  
23 macular oedema.

23 **Posterior capsule rupture**

24 1.8.9 When dealing with posterior capsule rupture, follow a protocol that covers:

- 25
- 26 • removing vitreous from the wound and anterior chamber
  - minimising traction on the retina

- 1                   • removing lens fragments in the posterior chamber or vitreous cavity
- 2                   • removing soft lens matter
- 3                   • implications for any lens insertion.

#### 4   **Postoperative eye protection**

5   1.8.10   Offer eye protection for people whose eye shows residual effects of  
6                   anaesthesia at the time of discharge after cataract surgery.

### 7   **1.9        Postoperative assessment**

8   1.9.1   Commissioners and service providers should ensure that the following are  
9                   in place:

- 10                   • Processes that identify complications after surgery and ensure that  
11                    there is prompt access to specialist ophthalmology services.
- 12                   • Processes to ensure that the postoperative section of the UK Minimum  
13                    Cataract Dataset for National Audit is collected and has been entered  
14                    into an electronic dataset.
- 15                   • Arrangements so that healthcare professionals discuss second-eye  
16                    cataract surgery with people who have a cataract in their non-operated  
17                    eye.

18   1.9.2   Consider collecting patient visual function and quality of life data for entry  
19                   into an electronic dataset.

20   1.9.3   Do not offer in-person first-day review to people after uncomplicated  
21                   cataract surgery.

22

## 1 Putting this guideline into practice

2 [This section will be finalised after consultation]

3 NICE has produced tools and resources [link to tools and resources tab] to help you  
4 put this guideline into practice.

5 [Optional paragraph if issues raised] Some issues were highlighted that might need  
6 specific thought when implementing the recommendations. These were raised during  
7 the development of this guideline. They are:

8 [add any issues specific to guideline here]

9 [Use 'Bullet left 1 last' style for the final item in this list.]

10 Putting recommendations into practice can take time. How long may vary from  
11 guideline to guideline, and depends on how much change in practice or services is  
12 needed. Implementing change is most effective when aligned with local priorities.

13 Changes recommended for clinical practice that can be done quickly – like changes  
14 in prescribing practice – should be shared quickly. This is because healthcare  
15 professionals should use guidelines to guide their work – as is required by  
16 professional regulating bodies such as the General Medical and Nursing and  
17 Midwifery Councils.

18 Changes should be implemented as soon as possible, unless there is a good reason  
19 for not doing so (for example, if it would be better value for money if a package of  
20 recommendations were all implemented at once).

21 Different organisations may need different approaches to implementation, depending  
22 on their size and function. Sometimes individual practitioners may be able to respond  
23 to recommendations to improve their practice more quickly than large organisations.

24 Here are some pointers to help organisations put NICE guidelines into practice:

25 1. Raise awareness through routine communication channels, such as email or  
26 newsletters, regular meetings, internal staff briefings and other communications with

- 1 all relevant partner organisations. Identify things staff can include in their own  
2 practice straight away.
- 3 2. Identify a lead with an interest in the topic to champion the guideline and motivate  
4 others to support its use and make service changes, and to find out any significant  
5 issues locally.
- 6 3. Carry out a baseline assessment against the recommendations to find out whether  
7 there are gaps in current service provision.
- 8 4. Think about what data you need to measure improvement and plan how you will  
9 collect it. You may want to work with other health and social care organisations and  
10 specialist groups to compare current practice with the recommendations. This may  
11 also help identify local issues that will slow or prevent implementation.
- 12 5. Develop an action plan, with the steps needed to put the guideline into practice,  
13 and make sure it is ready as soon as possible. Big, complex changes may take  
14 longer to implement, but some may be quick and easy to do. An action plan will help  
15 in both cases.
- 16 6. For very big changes include milestones and a business case, which will set out  
17 additional costs, savings and possible areas for disinvestment. A small project group  
18 could develop the action plan. The group might include the guideline champion, a  
19 senior organisational sponsor, staff involved in the associated services, finance and  
20 information professionals.
- 21 7. Implement the action plan with oversight from the lead and the project group. Big  
22 projects may also need project management support.
- 23 8. Review and monitor how well the guideline is being implemented through the  
24 project group. Share progress with those involved in making improvements, as well  
25 as relevant boards and local partners.
- 26 NICE provides a comprehensive programme of support and resources to maximise  
27 uptake and use of evidence and guidance. See our into practice pages for more  
28 information.

1 Also see Leng G, Moore V, Abraham S, editors (2014) [Achieving high quality care –](#)  
2 [practical experience from NICE](#). Chichester: Wiley.

### 3 **Context**

4 A cataract is defined as any opacity in the crystalline lens of the eye. It can affect  
5 one or both eyes. The changes to the transparency and refractive index of the lens  
6 result in various levels of visual impairment. This impairment is associated with  
7 decreased quality of life because it may restrict the person's ability to carry out daily  
8 activities and function independently, while increasing the risk of accidents and falls.

9 Cataracts most commonly affect adults as a result of biological ageing (age-related  
10 cataracts) and may be classified according to the area of the lens that is affected  
11 (nuclear sclerotic, cortical or posterior subcapsular cataracts). Cataracts can also  
12 occur in children, and may be classified according to the age of onset (congenital or  
13 infantile/juvenile cataracts). This guideline only covers cataracts in people who are  
14 18 years or older. Cataracts may occur secondary to hereditary factors, trauma,  
15 inflammation, metabolic or nutritional disorders, and exposure to radiation. In  
16 addition, lifestyle factors such as tobacco smoking and high alcohol intake are  
17 associated with an increased risk of developing age-related cataracts. Most  
18 cataracts are progressive, although the decline in visual function may be variable  
19 and unpredictable. The natural history of cataracts depends on the type and severity  
20 of the cataract and the presence of comorbid ocular conditions. In severe, untreated  
21 cases, cataracts can lead to significant reduction in vision, which is reversible with  
22 cataract surgery, although some level of visual impairment may persist.

23 Cataract surgery has a high success rate in improving visual function, with low  
24 morbidity and mortality. It is the most common operation performed in the NHS, with  
25 an ever growing need as the population ages.

26 Cataract management usually involves a multidisciplinary team that includes  
27 ophthalmologists, optometrists, nurses and technicians. Diagnosis is usually based  
28 on self-reported symptoms and a series of tests performed by an optometrist,  
29 normally based in the community. Symptoms may include blurred vision, difficulty  
30 seeing at night, sensitivity to light or glare, seeing 'halos' around lights and double

1 vision in a single eye. Diagnostic tests include a visual acuity test, and slit-lamp and  
2 retinal examinations.

3 In adults with early age-related cataracts, non-surgical management may include  
4 prescription of spectacles. Alternatively, adults with age-related cataracts may be  
5 referred for surgery by an optometrist or a GP. The clinical threshold used to access  
6 cataract surgery varies across NHS trusts in England. This has resulted in  
7 differences in access to cataract surgery, because policies vary in scope and content  
8 and are not necessarily consistent with research evidence or guidance provided by  
9 the Department of Health in [Action on cataracts](#) and the Royal College of  
10 Ophthalmologists' [Cataract surgery guidelines](#).

11 Guidance on appropriate referral criteria for cataract surgery is needed to address  
12 patient need and to optimise the allocation of NHS resources. In addition, an  
13 understanding of the most clinically and cost-effective methods for undertaking  
14 cataract surgery, and recommendations to minimise complications and surgical  
15 errors such as wrong intraocular lens implants, are needed to further improve patient  
16 care.

### 17 ***More information***

To find out what NICE has said on topics related to this guideline, see our web  
page on [eye conditions](#).

18

## 19 **Recommendations for research**

20 The guideline committee has made the following recommendations for research. The  
21 committee's full set of research recommendations is detailed in the [full guideline](#).

### 22 ***1 Toric lenses for astigmatism***

23 What is the cost effectiveness of toric lenses compared with on-axis or limbal-  
24 relaxing incision surgery, or non-toric lenses with no further intervention, in an NHS  
25 context, taking account of the whole care pathway cost implications from pre to  
26 postoperative phases, stratified by the preoperative level of astigmatism?



1 **Why this is important**

2 There is clear evidence that toric lenses are effective at reducing levels of  
3 postoperative astigmatism, but evidence on their cost effectiveness is much less  
4 conclusive. Although a cost–utility analysis of toric lenses was evidenced from the  
5 USA, it was not possible to relate the costs to a UK NHS perspective. Acquisition  
6 costs of toric lenses are unlikely to exceed those of standard monofocal lenses, but  
7 their use has possible associated costs, including additional preoperative tests,  
8 biometry measurements, surgical time and equipment (toric markers), postoperative  
9 assessments and further surgery, which could be significant. A comparison with on-  
10 axis or limbal-relaxing incisions would be advantageous because there are currently  
11 no resource constraints for using these techniques. Further cost-effectiveness  
12 research using UK NHS costings would be of benefit in helping to formulate future  
13 recommendations about their use.

14 **2 Quality of life in cataract surgery**

15 What vision-specific quality of life measures best capture visual changes in a  
16 population with cataracts?

17 **Why this is important**

18 Although visual acuity is still commonly used to decide whether cataract surgery is  
19 needed, it is a crude measure that will often fail to detect other vision problems that  
20 may justify surgery (for example, glare and loss of colour vision). The best possible  
21 decision-making aids would be measures of preoperative and postoperative vision-  
22 related quality of life, which could then be used to identify groups of people who do  
23 not have an improvement in quality of life after surgery. However, most prioritisation  
24 criteria are based primarily on visual acuity and visual function (usually measured  
25 using the VF-14), which capture only part of the impact of a cataract on quality of life.  
26 The development and validation of suitable vision-specific quality of life measures  
27 would aid the decision-making process for cataract surgery, and help to accurately  
28 quantify the quality of life gains that may be expected from surgery.

1 **3 Indicators and thresholds for referral for cataract surgery**

2 What is the association between preoperative vision- and health-related quality of life  
3 on postoperative vision- and health-related quality of life, and self-reported  
4 postoperative improvement?

5 **Why this is important**

6 In contrast to the data linking preoperative visual acuity and visual function with  
7 postoperative visual acuity and visual function, there is a lack of evidence on the  
8 association between preoperative vision- and health-related quality on postoperative  
9 outcomes and levels of satisfaction for people having cataract surgery. This makes it  
10 difficult either to identify those groups of individuals who may achieve the largest  
11 gains from surgery, or to provide people with accurate information about what their  
12 potential gains may be. Robust information around the link between preoperative  
13 patient characteristics and outcomes would be useful both for prioritisation of  
14 surgery, and to help better inform individuals about the levels of gain they may  
15 individually expect to get from surgery.

16 **4 Interventions to manage cystoid macular oedema**

17 What is the most effective postoperative medical management for cystoid macular  
18 oedema?

19 **Why this is important**

20 Although there is evidence for using steroids and non-steroidal anti-inflammatory  
21 drugs (NSAIDs) in treating cystoid macular oedema, no evidence has been identified  
22 for interventions such as Diamox, steroidal anti-inflammatory drugs (SAIDs) or  
23 intraocular anti-vascular endothelial growth factors (anti-VEGFs). Further  
24 randomised controlled trials with increased numbers of participants would be of  
25 benefit to the evidence base, which would help lead to the formulation of future  
26 recommendations for the postoperative treatment cystoid macular oedema.

27 **5 Interventions to prevent endophthalmitis**

28 What is the effectiveness of postoperative antibiotic drops to reduce rates of  
29 endophthalmitis after cataract surgery?

1 **Why this is important**

2 There is a lack of evidence on postoperative antibiotics to reduce rates of  
3 endophthalmitis, which may be because they are provided as part of standard good  
4 clinical practice in the UK. In addition, it is recognised that patients are invariably  
5 receiving other drops (for example, steroids), which are likely to be offered in  
6 combination with postoperative antibiotic drops, and often in a single-drop product.  
7 Well conducted randomised controlled trials of postoperative antibiotics in people  
8 having cataract surgery would help add to the evidence base and so inform future  
9 recommendations on their use.

10 **ISBN:**