Consultation

Minor update of recommendation 1.6.3. on bilateral simultaneous surgery in the cataracts guideline (NICE guideline NG77)

April 2025

Minor update proposal

We are proposing to make a minor update on recommendation 1.6.3 in the Cataracts guideline (NICE guideline NG77) to ensure the recommendation does not unduly discourage clinicians from using shared decision making to offer a choice of immediate sequential bilateral cataract surgery or delayed surgery to patients.

The current guideline recommendation wording is:

1.6.3 Consider bilateral simultaneous cataract surgery for:

- people who are at low risk of ocular complications during and after surgery **or**
- people who need to have general anaesthesia for cataract surgery but for whom general anaesthesia carries an increased risk of complications or distress.

The proposed updated wording is:

1.6.3 Offer a choice of either immediate sequential bilateral cataract surgery or first-eye surgery followed by delayed second eye-surgery to people who:

- are at low risk of ocular complications during or after surgery or
- need to have general anaesthesia.

Reasons for the proposal

Context

NICE were contacted by the Royal College of Ophthalmologists (RCOphth) who submitted evidence and feedback in relation to bilateral simultaneous cataract surgery. The RCOphth explained that there is a smaller proportion of immediate sequential bilateral cataract surgery (ISBCS) being done each year since the slight upturn in ISBCS during Covid. They considered that NICE guidance may be partly responsible for this low rate of ISBCS, and that this low rate may cause an unnecessary waste of resources by continuing to do the majority of cataract surgeries in 2 separate operations (delayed second eye-surgery).

Evidence considered when developing the original guideline

Recommendations 1.6.2 to 1.6.4 related to bilateral simultaneous cataract surgery was underpinned by the following review question: What is the effectiveness of bilateral simultaneous (rapid sequential) cataract surgery compared with unilateral eye surgery?

Only 3 RCTs were included in the guideline, which found that there were no meaningful differences in levels of intraoperative, postoperative or serious postoperative complications between people undergoing bilateral simultaneous cataract removal and those undergoing sequential surgery.

In terms of health economics, 1 published cost-effectiveness study was identified which found that immediate sequential cataract surgery dominates (is more effective and cheaper than) delayed sequential surgery, although uncertainty around the estimate of cost-effectiveness could not be reliably established.

The committee agreed that the evidence presented was robust, both in demonstrating that there were no major differences in the long-term visual outcomes of same day or different day surgery in the groups recruited but agreed that there were 2 major limitations in the evidence base. Firstly, the sample sizes were too small to pick up potential differences in rare but

catastrophic complications, which are the main reason for concern with simultaneous surgery. Secondly, the populations in the trials were very carefully selected to only include those people with low risk of intra- or postoperative complications, and therefore no evidence was available on outcomes for people at higher risk, such as those with ocular comorbidities. Therefore, the committee decided it would only be appropriate to recommend simultaneous surgery as an option in the population covered by the trials, specifically those at low risk of intra- or postoperative complications.

New evidence

The topic suggester submitted 6 studies; 2 of the studies were already in the guideline evidence base and 3 studies would not be eligible for inclusion based on the review protocol. The remaining study was a Cochrane review (Dickman 2022) which included 14 studies (2 RCTs; both already included in guideline) of 276,260 participants which compared ISBCS with delayed sequential bilateral cataract surgery (DSBCS).

The Cochrane review found that refractive outcomes showed no significant differences between groups at 1 to 3 months post-surgery. There was no major difference in intraoperative and postoperative complications between ISBCS and DSBCS, though significant heterogeneity existed between studies. It found limited evidence on the risk of endophthalmitis with ISBCS compared to DSBCS, with a very low risk of unilateral endophthalmitis in both groups and no reports of bilateral endophthalmitis. However, the Cocrane authors noted that none of the studies were powered to detect bilateral endophthalmitis which is considered a very rare event. The authors also noted that all of the studies included low risk patients. Cost-effectiveness results were unreliable due to flawed assumptions, but all studies reported lower costs for ISBCS compared to DSBCS

Overall, the Cochrane authors concluded that there are probably no clinically important differences in outcomes between immediate and delayed surgery, but with lower costs for immediate surgery. However, the amount of evidence was limited, and the certainty of the evidence was graded moderate to very

low. In addition, the authors considered that there was a need for well-designed cost-effectiveness studies.

Topic expert feedback

Expert input was sought on the proposed minor update to recommendation 1.6.3 as follows:

1.6.3 Offer a choice of either immediate sequential bilateral cataract surgery or first-eye surgery followed by delayed second eye-surgery to people who:

- are at low risk of ocular complications during or after surgery or
- need to have general anaesthesia but for whom general anaesthesia carries an increased risk of complications.

Experts were asked if the change was clinically appropriate. Experts were also asked whether immediate sequential bilateral cataract surgery is the most commonly used term for this procedure in the NHS, and if there are any concerns that the term ‘immediate’ can be misunderstood by patients and carers to mean an immediate or urgent appointment.

A total of 10 topic experts (including the RCOphth) were contacted and 6 replied. Of the 6 that replied 4 agreed that this proposed minor update would be clinically appropriate. However, there were 2 experts that considered it would not be clinically appropriate. The major concerns raised were that same day surgery is harder to implement in teaching hospitals and those with a complex case mix. There was also concern about risk of total blindness and acceptability to patients; this expert also noted that they do not use general anaesthetic often at all so this is not a major factor. But another topic expert noted that when general anaesthesia is used this generally poses a risk due to the older age of most people having cataract surgery, thus there is no need to say, ‘for whom general anaesthesia carries an increased risk of complications or distress’.

In terms of terminology, all 6 experts agreed it is the most common terminology used in clinical practice. However, 1 expert did not consider the terminology grammatically correct and provided an alternative wording.

Comparison of new evidence and intelligence with the guideline evidence base

The previous guideline evidence base showed no major differences in the long-term visual outcomes of same day or different day surgery in the groups. The new evidence from the Cochrane review found similar results. However, feedback from topic experts indicated no clear consensus on whether it would be clinically appropriate to update the recommendation1.6.3. As such, it was decided to further consult on this proposed minor update with a range of stakeholders to seek a wider range of views.

Health inequalities

No specific inequalities were noted.

Overall proposal

We propose to make a minor update to recommendation 1.6.3 on bilateral simultaneous cataract surgery as follows:

1.6.3 Offer a choice of either immediate sequential bilateral cataract surgery or first-eye surgery followed by delayed second eye-surgery to people who:

- are at low risk of ocular complications during or after surgery or
- need to have general anaesthesia.

However, we are seeking the views of stakeholders to understand if this is clinically appropriate.