Best Practice

Eyepad and cartella / eyeshield

Authors: Redmer van Leeuwen, on behalf of the Sustainable Ophthalmology project group

Translators: Tristan Reuser, Shahzad Tavakoli

Approved by: Quality Committee of the Netherlands Ophthalmological Society (NOG) and Working Group Dutch Intra ocular Implant Club (NIOIC)

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NOG NEDERLANDS OOGHEELKUNDIG GEZELSCHAP

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1. Summary: advice for use of eyepads and cartella

Do not use an eyepad or cartella after uncomplicated phacoemulsification cataract surgery, with local anesthetic. The use of ointment is sufficient.

Instruct patients that eye rubbing is not allowed. In certain circumstances an eyepad with cartella may be justified, for example in patients that do not understand the instructions, in case of a large incision, or a corneal abrasion.

If used, there is no need for sterile eyepads or cartellas: they can be supplied non-sterile.
This means cheaper production, cost, and less CO_2 emissions.

2. Why this Best Practice?

Since ‘every little helps’, we questioned the standard use of eyepads and cartellas in uncomplicated phaco surgery. The only reason for use is prevention of potential damage by the patient, and post op endophthalmitis. There is no evidence to say that covering the eye reduces this risk.

3. What do current guidelines tell us?

The FMS guideline Cataract (2021) does not mention the use of eyepads or cartellas after cataract surgery. Most clinics that use these measures have done so, out of habit. Any evidence of reduction in endophthalmitis has not been considered in policy.

4. Summarising the current literature

- A small randomized study from 2005 of 133 patients did not find any difference in drops only, eyepad or cartella (Mayer et al 2005). Eyepads did cause more discomfort to the patient.
- Another small randomized trial (60 patients) where patching and 'instant vision; were compared found more discomfort in patients without an eye patch, and they preferred and eyepad (Stifter et al 2007)
- A retrospective study of 1400 patients from 2011, where 1/3 of patients did not get a cartella, showed there was no difference in post op complications (Lindfield et al 2011). Patients did mention discomfort with their cartella.
- A recent study (Gazit et al 2020) showed more corneal oedema in patients with an eyepad and eyedrops, than in patients with a cartella and eyedrops.

5. Experience in eye clinics

There is lack of evidence, as to the usefulness of using eyepads and cartellas. It is unlikely that a study will ever be proposed and done. It is therefore useful to see what various clinics do.

Some dutch eye clinics have recently (Amphia, Rijnstate, Bergman) or even more than 30 years ago (Xpert clinics Zeist) stopped using eyepads and cartellas in uncomplicated cases: only in certain circumstances will use be considered.

Type of local anesthetic is important in considering it's use. Subtenon or retrobulbar local anesthetic may influence eyeclosure: diplopia or lagophthalmos may be reason to use eyepads. In cases of general anesthesia there may also be arguments for using eye coverings, as uncontrolled (hand) movements are possible.

In cases of Immediate Sequential Bilateral Cataract Surgery padding is naturally out of the question.

6. Conclusion

No binding advice has been given regarding the use of eyepads or cartellas after phaco emulsification cataract surgery. No advantage has been described in the literature. Some eye clinics have stopped the use, which seems safe. Their only use would be in circumstances of complicated surgery or potential non cooperation.

Hence we advise not to use eyepads or cartellas in uncomplicated cataract surgery, and in those cases where it is thought to be useful, only to use a non sterile cartella, which is the more sustainable, and cheaper option.

7. What is the status of Best Practice documents?

It is important to state that this Best Practice is advisory, and not mandated: it is not a guideline. A guideline is more or less binding, though one can diverge based on sound reasons. Best Practices are built on the foundation of guidelines, evidence based, and approved by the NOG.

Thus: one can diverge from Best Practice guidelines, though it is encouraged to implement these in your practice.

All guidelines will be incorporating, in the future, sustainability, and in so doing, converge with sustainable practice guidelines.

This Best Practice is written for eye specialists and theatre assistants.

Best Practices contain many examples that can easily be implemented in current practice, without much ado. The documents are living documents, and so will change with new evidence surfacing.

Disclaimer

- *None of the authors have declared conflicts of interest*
- *This advice has been collated based on evidence available at the time of writing*
- *This Best Practice is meant to support current processes, but is not a guideline*
- *Even though care has been taken to put this document together, the NOG canot be held liable for it's contents.*

8. References

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