

Bilateral kataraktoperation

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(Från ASCRS instructional course 2016: Immediate
Sequential Bilateral Cataract Surgery (ISBCS) —Current
Status in the USA and the World)



Bindningar:

- Alcon
- Bausch+Lomb
- Carl Zeiss
- Johnson & Johnson
- Théa Laboratoires
- Styrelseledamot, International Society for Bilateral Cataract Surgeons



iSBSCS guidelines for excellence in ISBCS





iSBSCS General Principles for Excellence in ISBCS 2009

This document was reviewed and approved by the membership at the 2nd annual meeting of iSBSCS, Sept. 14, 2009.

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1. Cataract or refractive lens surgery should be indicated in both eyes.
2. Any concomitant relevant ocular or periocular disease should be managed.
3. The complexity of the proposed ISBCS procedure should be easily within the competence of the surgeon.
4. The patient should provide suitable informed consent for ISBCS, being free to choose ISBCS or DSBCS.
5. The risk for Right - Left eye errors should be minimized by listing all surgical parameters (selected IOL, astigmatism, etc.) for both eyes on a board visible to all in the operating room (OR), at the beginning of each ISBCS case. The WHO operative checklist should also be used if possible.¹
6. Intraocular lens power errors are minimized by having OR personnel familiar with the calculation methods used. The original patient charts should be available in the OR, and everybody passing the IOL to the surgical table should confirm the IOL choice. ISBCS nursing staff should be specifically trained and experienced.
7. Complete aseptic separation of the first and second eye surgeries is mandatory to minimize the risk of post-operative bilateral simultaneous endophthalmitis (BSE).
 - a. Nothing in physical contact with the 1st eye surgery should be used for the 2nd.
 - b. The separate instrument trays for the two eyes should go through complete and separate sterilization cycles with indicators.
 - c. There should be no cross-over of instruments, drugs or devices between the two trays for the two eyes at any time before or during the surgery of either eye.
 - d. Different OVDs, and different manufacturers or lots of surgical supplies should be used, whenever reasonable (where the device or drug type has ever been found to be causative of endophthalmitis of the Right and Left eyes).
 - e. Nothing should be changed with respect to suppliers or devices used in surgery without a thorough review by the entire surgical team, to assure the safety of proposed changes.
 - f. Before the operation of the second eye, the surgeon and nurse shall use acceptable sterile routines of at least re-gloving after independent preparation of the second eye's operative field.
 - g. Intracameral antibiotics have been shown to dramatically reduce the risk of post-operative endophthalmitis. Their use is strongly recommended for ISBCS.
8. Any complication with the first eye surgery must be resolved before proceeding. Patient safety and benefit is paramount in deciding to proceed to the 2nd eye.
9. ISBCS patients should not be patched. Post-operative topical drops are most effective immediately post-operatively and should be begun immediately post-op, in high doses, which can be tapered after the first few days. Other ophthalmic medications (e.g. for glaucoma) should be continued uninterrupted.
10. ISBCS surgeons should routinely review their cases and the international literature to be sure that they are experiencing no more than acceptable levels of surgical and post-operative complications. Membership in the *International Society of Bilateral Cataract Surgeons* (www.iSBSCS.org) is highly recommended to keep abreast of the latest ISBCS information.

¹ Haynes AB, Weiser TG, Barry WR, et al. A Surgical Safety Checklist to Reduce Morbidity and Mortality in a Global Population. *N Engl J Med* 360: 5: 491-499 (Jan. 29, 2009).



iSBCS guidelines for excellence in ISBCS

- 1. Cataract or refractive lens surgery should be **indicated** in both eyes.
- 2. Any **concomitant** relevant ocular or periocular **disease** should be **managed**.
- 3. The complexity of the proposed ISBCS procedure should be easily within **the competence of the surgeon**.



iSBCS guidelines for excellence in ISBCS

- 4. The patient should provide suitable **informed consent** for ISBCS, *being free to choose ISBCS or DSBCS*.
- 5. The risk for **Right – Left eye errors should be minimized** by listing all surgical parameters (selected IOL, astigmatism, etc.) for both eyes on a board visible to all in the operating room (OR), at the beginning of each ISBCS case. The WHO operative checklists should also be used if possible.
- 6. Intraocular **lens power errors are minimized** by having OR personnel familiar with the calculation methods used. The original patient charts should be available in the OR, and everybody passing the IOL to the surgical table should confirm the IOL choice. ISBCS nursing staff should be specifically trained and experienced.



iSBCS guidelines for excellence in ISBCS

- 7. **Complete aseptic separation of the first and second eye surgeries is mandatory** to minimize the risk of postoperative bilateral simultaneous endophthalmitis (BSE).
 - a. Nothing in physical contact with the 1st eye surgery should be used for the 2nd.
 - b. The separate instrument trays for the two eyes should go through complete and separate sterilization cycles with indicators.
 - c. There should be no cross-over of instruments, drugs or devices between the two trays for the two eyes at any time before or during the surgery of either eye.
 - d. Different OVDs, and different manufacturers or lots of surgical supplies should be used, whenever reasonable (where the device or drug type has ever been found to be causative of endophthalmitis of toxic anterior segment syndrome) and possible (if different lots or manufacturers are available) for the Right and Left eyes.
 - e. Nothing should be changed with respect to suppliers or devices used in surgery without a thorough review by the entire surgical team, to assure the safety of proposed changes.
 - f. Before the operation of the second eye, the surgeon and nurse shall use acceptable sterile routines of at least re-gloving after independent preparation of the second eye's operative field.
 - g. **Intracameral antibiotics** have been shown to dramatically reduce the risk of post-operative endophthalmitis. Their use is **strongly recommended for ISBCS.**



iSBCS guidelines for excellence in ISBCS

- 8. **Any complication** with the first eye surgery **must be resolved** before proceeding. **Patient safety and benefit** is paramount in deciding to proceed to the 2nd eye.
- 9. ISBCS patients should not be patched. **Post-operative topical drops** are most effective immediately postoperatively and should be begun immediately post-op, in high doses, which can be tapered after the first few days. Other ophthalmic medications (e.g. for glaucoma) should be continued uninterrupted.
- 10. **ISBCS surgeons** should routinely **review their cases** and the international literature to be sure that they are experiencing no more than acceptable levels of surgical and post-operative complications. Membership in the International Society of Bilateral Cataract Surgeons (www.iSBCS.org) is highly recommended to keep abreast of the latest ISBCS information.



Lämpliga patienter för ISBCS?

- Inga RCT
 - Inga strikta reglementen från myndigheter/organisationer
 - Aldrig absolut krav på ISBCS
 - Mycket få *absoluta* kontraindikationer
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- Urval förändras med växande erfarenhet



Hur Linköping började...



- 1998: 10 patienter i bifokal IOLstudie (Array®) - ISBCS
- "...kan man inte göra det här på "vanliga" patienter?"
- 1999: Introduktion i kliniken:
 - Efter första ögat fick patienten gå ut i väntrummet igen och en annan patient opererades innan andra ögat
 - All utrustning (fakomaskinen också!) byttes mellan 1:a och andra ögat
 - ...och patienturvalet?



Hur Linköping började...

- ***ISBCS kan föreslås för patienter med...***
- Preoperativ synskärpa mellan 0.1 and 0.5 i båda ögonen
 - Stora besvär om ena katarakten lämnas
 - FR – HR – P+L kan indikera tät katarakt med ökad svårighetsgrad => risk för förlängd eller komplicerad operation
- Kraftig ametropi ($> +/- 3$ D)
 - Anisometri vid ensidig operation.
- Önskemål om snabb synrehabilitering



Hur Linköping började...

- ***Kontraindikationer***
- Ökad infektionsrisk (florid blefarit, immundefekt)
- Fuchs endoteldystrofi
- Aktiv uveit
- Oreglerat glaukom
- Osäkert refraktivt utfall (keratokonus, tidigare korneal refraktiv behandling / transplantation etc)
- Diabetes mellitus med central retinopati
- Liten pupill med förväntat behov av mekanisk dilatation, lös lins eller andra tillstånd medförande komplicerad kirurgi
- Tveksam medverkan (missbruk, demens)
- Patienten önskar bara ett öga opererat



Hur Linköping gör nu...

- Självständig kirurg med minst 3 års erfarenhet
- Bilateral operation planeras fr a kataraktkirurger – ibland som extra operation på programmet
- Separata batchar för viskoelastika, ej för andra vätskor/instrument
- EJ ISBCS vid prov av ny materiel!!!
- Ofta "A"-operationer – följs upp via optiker och återkopplingsformulär
- "B" och (sällan) "C"-operationer görs också – uppföljning på kliniken
- 10-20% av patienterna



Sammanfattning

- Patienter med synskärpa HV 0.1- 0.5
- Annan ögonsjukdom under kontroll
- Uteslut korneala, uveala eller retinala tillstånd som ökar komplikationsrisk (kornealödem, postoperative irit, cystiskt macula ödem
- Acceptera EJ patienter med tydligt ökad infektionsrisk

- ISBCS är INGEN GENVÄG – ekonomiska och logistiska fördelar får INTE gå före patientens bästa!
- ...och det bästa för många patienter är ändå ISBCS...

Tack för uppmärksamheten!

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