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ISBCS COURSE 08-202

ASCRS 2016.

p. 1

ISBCS & IC Antibiotics: SAA Personal History to 2016 03.
ISBCS performed routinely: 1996 01 – 2016 03 (20 yrs)

- All cataracts 1996 01 to 2016 03 31 = 12,631
  - ISBCS Eyes = 9,894 (78.3%)
  - DSBCS or UCS = 2,737 (21.7%)

- IC Vigamox Cataracts 2004 12 to 2016 03
  - 2004 12: 3,430 at 100 μg/0.1 cc. Endophth cases = 2
  - 2010 02: 3,152 at 300 μg/0.2 cc. Endophth cases = 0
  - 2014 09: 1,052 at 450 μg/0.3 cc. Endophth cases = 0

- IC Vancomycin cataracts 1996 01 – 2004 11
  - No IC antibiotics, all UCS = 4,797
  - Endophth cases = 0

- No IC antibiotics, all UCS = ~ 6,000 (1980-1995)
  - Endophth cases = 1

ISBCS: Terminology & Brief History

iSBCS = ISBCS = Immediately Sequential Bilateral Cataract Surgery.
SBCS = Simultaneous Bilateral Cataract Surgery.
DSBCS = Delayed Sequential Bilateral Cataract Surgery.
UCS = Unilateral Cataract Surgery

Founding Mission Statement (Sept. 1, 2008):
iSBCS exists to promote education, mutual cooperation, and progress in simultaneous bilateral cataract surgery.

ISBCS Active Membership April 10, 2016

28 Countries, 150 members:

Top 5:

<table>
<thead>
<tr>
<th>Country</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>27</td>
</tr>
<tr>
<td>Canada</td>
<td>13</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>8</td>
</tr>
<tr>
<td>Spain</td>
<td>8</td>
</tr>
<tr>
<td>India</td>
<td>7</td>
</tr>
</tbody>
</table>

Others: Argentina, Australia, Belgium, Brazil, Czech Republic, Finland, France, Germany, Greece, Hong Kong, Hungary, Ireland, Italy, Japan, Kuwait, Malaysia, Mexico, New Zealand, Norway, Poland, Sweden, Switzerland, The Netherlands...

Members April, 2016.

iSBCS founded Sept. 1, 2008 – 7.5 years

Membership has increased fairly linearly since the society was founded.

600 unique visitors per month, 2015, 500 in 2014.

Monthly unique Visitors

<table>
<thead>
<tr>
<th>Month</th>
<th>Unique Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>600</td>
</tr>
<tr>
<td>2015</td>
<td>500</td>
</tr>
</tbody>
</table>

iSBCS org activity 2014, 2015
A few country’s issues

1. USA
   1. ISBCS becoming increasingly popular in HMOs & private care.

2. Canada
   1. Government funding of ISBCS dropped due to inadequate data collection methods. Popular in private care in Ontario and BC.

3. Sweden
   1. Just > 10% of procedures

4. Extremely common in:
   1. Finland, areas of Spain (Canary Islands...), foci in UK.

5. Increasing in: India, West Africa, Europe

Experience Based Principles of ISBCS

“General Principles for Excellence in ISBCS”

Passed by ISBCS membership


Most commonly downloaded ISBCS document #1

IC Vigamox instruction sheet

Most commonly downloaded ISBCS document #2
**The RULE for ISBCS**
- “If any unresolved complication occurs with the 1st eye, the 2nd eye should be deferred.”
- but...
- The best time to operate the 2nd eye is immediately after gaining the experience of the individual peculiarities of the 1st eye.
- “The 2nd eye is always easier”

**Advantages of ISBCS**
1. Avoids fear for patient who had a problem with 1st eye.
2. Greater visual improvement after 2nd eye surgery than 1st.
3. Immediate rehabilitation of visual system.
4. Better planning of refractive result.
   - no period of anisometropia.
5. Fewer patient visits (traffic accident deaths).
6. Improved care by hospital staff.
7. Unusual patients (Christopher)

**The 3½ big fears with ISBCS**
1/2. Preferred practice patterns & collegial hostility.
2. Post operative retinal detachment (too late to matter)
3. *IOL power errors in 1st eye, correctable for 2nd?*
   (resolved by IOLM & Lenstar, Haigis & Olson Eqns. & ASCRS post Refr. Surg. Calc.)
4. Bilateral post operative endophthalmitis (BSE) & TASS (Toxic Anterior Segment Syndrome).

**Endophthalmitis in Bilateral Cataract Surgery**

<table>
<thead>
<tr>
<th>ISBCS study: JCRS 2011*</th>
<th>ORA &amp; MFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Later Adjuncts only</td>
<td>2009-2010</td>
</tr>
<tr>
<td>Moxifloxacin</td>
<td>10,555</td>
</tr>
<tr>
<td>Vancomycin</td>
<td>9,313</td>
</tr>
<tr>
<td>Cefuroxime (cef)</td>
<td>38,975</td>
</tr>
<tr>
<td>MFA</td>
<td>14,266</td>
</tr>
<tr>
<td>MFA/OM</td>
<td>19,359</td>
</tr>
<tr>
<td>MFA/OM/OM</td>
<td>19,359</td>
</tr>
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</tbody>
</table>

**Significant Monetary Savings of ISBCS.**
1. **ESCRS 2008, Berlin: Tiina Leivo**
   - Risk of bilateral simultaneous endophthalmitis (BSE) ≤ 1/1,000,000 (ISBCS Endophthalmitis study suggests 1:100M)
   - SBCE Saving estimated ~ €1,600 / patient
   - Additional cost to prevent 1 BSE is: €729 M / case ~ $1,600 / SBE case.
2. **O’Brien, Gonder, et al. divided costs (Canada) 2010.**
   - Social costs
     - For all the time families take to bring in patients
     - Institutional costs
     - London, Ontario, Canada ~ $250 M USD / BSE prevented.
   - Extra medical visit costs
     - At least another $500 M USD / BSE, due to fewer visits.

**2014 Debates: SURPRISE!**
I took part in 2 major debates pro-con ISBCS:
- ASCRS and ESCR.
  - opposition to ISBCS evaporated.
- 1.ASCR
  - SAA vs Kent Stiverson
- 2.ESCRS
  - SAA vs Jose Guell
Cataract surgeries 2012-2013

Patients n=3750
Eyes n= 5662

- 1921
- 1829
- 1921

Unilateral
Bilateral

USA: Colorado Permanente Medical Group (HMO)

R Kent Stiverson, John Kloor, David Litoff

- 66% ISBCS
- Of patients with operable cataracts in both eyes
- 80% chose ISBCS

- Higher refractive predictability and final patient satisfaction favours "consecutive" for some investigators, and this is perhaps more significant with premium IOLs
- Because the onset of postoperative CME (0.1/2.0%) is delayed, patients (risk?) may benefit from an interval between surgeries
- "Same" day might be contradicted in certain risk groups: biometric limitations (very long, short eyes, previous CRS...), advanced diabetes, Fuchs dystrophy...
- "Minimalization" patient perception (as it happened with LRS) is, from my point of view, much more important and dangerous than the debatable associated financial advantage of "same" day

"Trivialization of cataract surgery"

Take-home message

- Literature research shows no statistically significant differences on complication rates and visual results between "same" day (under adequate prophylactic conditions) or "consecutive" days cataract surgery
- ISBCS is rapidly gaining acceptance, especially in USA.
- Opposition to ISBCS is disappearing globally.
- ISBCS membership & website activity at www.isbcs.org are steadily increasing.
- ISBCS proposed for: MSICS in underserved areas, FLACS
- Constant vigilance of infections & all other complications is necessary.

ISBCS Summary:

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4. ISBCS proposed for:
   1. MSICS in underserved areas
   2. FLACS
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