Lens extraction for angle closure glaucoma

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Prevalence of PACG in China

Table 1. Prevalence of primary glaucoma and reported blindness rates
from different population-based studies in the region.

<table>
<thead>
<tr>
<th>Location</th>
<th>Age (years)</th>
<th>Men (%)</th>
<th>Women (%)</th>
<th>Prevalence (%)</th>
<th>Blindness (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>65</td>
<td>10.4</td>
<td>8.3</td>
<td>0.9</td>
<td>0.2</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>67</td>
<td>8.4</td>
<td>6.7</td>
<td>1.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Malaysia</td>
<td>65</td>
<td>8.4</td>
<td>6.7</td>
<td>1.2</td>
<td>0.3</td>
</tr>
<tr>
<td>China</td>
<td>65</td>
<td>8.4</td>
<td>6.7</td>
<td>1.2</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Financial disclosure

None

Treatment

- Medication
- Laser
- Surgery
  - Trabeculectomy
  - Lens extraction

WORLD VIEW

Glaucoma in China: how big is the problem?
Paul J Foster, Gordon Johnson

The number of people with glaucoma worldwide in 2010 and 2020

WORLD VIEW

Table 2. Number of people with glaucoma worldwide in 2010 and 2020.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of People with Glaucoma</th>
<th>Percentage of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>70,000,000</td>
<td>3%</td>
</tr>
<tr>
<td>2020</td>
<td>80,000,000</td>
<td>4%</td>
</tr>
</tbody>
</table>

Half of PACG in the world are in China

- In 2020: 10,090,552 (48%)
- Highest incidence in Chinese people
- Highest blindness rate in Chinese people

Quigley HA, Broman AT. Br J Ophthalmol 2006;90(3):262-7
d
Laser peripheral iridotomy

After LPI

- 59% angle closure
- 52% patients need treatment
- 10.7% need glaucoma surgery
- Cataract surgery is needed later

Trabeculectomy

- Complications
  - Malignant glaucoma
  - Choroid detachment
  - Shallow anterior chamber
  - Bleb leaking
  - Hemorrhage
  - ...

Complications of trabeculectomy
Complications of trabeculectomy

The Role of the Lens in angle closure


Lens extraction

LPI vs Lens extraction

- IOP control
- quality of life
- cost

Lens extraction has been recommended, on an individual basis, for the management of angle closure, also by guidelines

Eagle trial

Lens extraction: pros

- IOP-lowering
- angle width and anterior chamber depth
- visual acuity and vision-targeted functioning
- health-related quality of life
- more cost-effective

Lens extraction: cons

- corneal endothelial cell density
- intraoperative complications
- no accommodation function
- glaucoma drainage surgery is needed in 12% of PACG cases after cataract surgery


controversial

☐ potentially more complications in less trained surgical hands
☐ overtreatment

MORE EVIDENCE NEEDED