Surgical Management of Cataract
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Types Of Cataract
Two Types of cataracts are mainly encountered amongst leprosy sufferers -

- **Senile**
- **Complicated**

Types Of Cataract Operation
There are also Two Types of operations practiced for cataract operation—

- Intra-Capsular Cataract Extraction (ICCE)
- Extra-Capsular Cataract Extraction (ECCE With PCIOL) with Intra-Ocular Lens Implantation

Operation of choice: ECCE with PCIOL
- It does not require extra-spectacles.
- Occurrence of Immediate Post-operative Complications are less.
- Long term complications are more in ICCE.
- Patient’s acceptance, satisfaction with quality of life is more with ECCE with PCIOL than ICCE.

Surgical Procedure
Pre-operative check up
- Skin smear examination – insignificant
- General Examination: Specially search for other septic focus in the body – insignificant
- Blood Sugar and Urine examination – Must
- Blood Pressure and General Check up – Must
- Local Ocular Examination – Tear Drainage System, Intra-Ocular Pressure, Associated eye diseases very much essential
- History of reaction, relapse and treatment – Helpful
- Biometry
Anaesthesia

- Local Anaesthesia: 2% Xylocaine with Adrenaline (4 c.c.) + Inj. Buviropacaine (Sensorcaine) (3c.c.): Peri bulbar Infiltration
- Instillation of 2% Paracaine
- Pre-operative anebiotech & Flurbiprofen to our live
- Tropical Mydriasis by Tropicamide

Operative Technique

- ECCE by can opener technique
- Removal of Cortex by Biway Simogii’s Canula
- PCIOL
- PBH/Multiple Sphincterotomy
- Closer of the wound by 4 to 5 interrupted 8-0 VIRGINSILK
- Formation of A.C. by balanced salt solution
- Sub-Conjunctival Injection of Inj. Gentleyn + Inj. Dexamethasone

Post Operative Care

- Dressing after 24 hours with Tropicamide, Dexamethasone, Antibiotic
- Continue the medication for two months
- No role of systemic antibiotic or steroid for routine cases
- Patients can go home after 72 hrs.
- Check up at fortnight interval.
- Removal of stitch after two months

Post-operative complications and Poor visual outcome

These are the result of – HIGH RISK EYES WHICH ARE STILL OUT OF OUR REACH TO CONTROL PROPERLY.

- Hyposthetic Cornea
- Lagophthalmos with exposed Cornea
- Relapse
- Reaction
- Causes unknown
The five years follow up study of cataract surgery with IOL amongst people affected by MB Leprosy in Eastern India

The aim of this longitudinal study: Review the post operative outcome of Intra Ocular Lens Implantation with cataract surgery amongst the Leprosy sufferers.

### Study Group

<table>
<thead>
<tr>
<th>Type of Leprosy</th>
<th>No. of Eyes</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>MB</td>
<td>180</td>
<td>140</td>
<td>40</td>
</tr>
</tbody>
</table>

Age Group:

- >60 Yrs.
- >40 Yrs.
- <=60 Yrs.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;60 Yrs.</td>
<td>90</td>
<td>50</td>
<td>140</td>
</tr>
<tr>
<td>&gt;40 Yrs.</td>
<td>40</td>
<td>100</td>
<td>140</td>
</tr>
<tr>
<td>&lt;=60 Yrs.</td>
<td>50</td>
<td>30</td>
<td>80</td>
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<table>
<thead>
<tr>
<th>Observation (At the begining of 5th year)</th>
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<tbody>
<tr>
<td>Total</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>180</td>
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Cataract Surgery offered good visual outcome. Inflammatory conditions responded satisfactorily with local and systemic steroid and Non Steroidal Anti Inflammatory therapy.

Still 2% cases turned into irreversible blindness following Corneal Opacity, Oclusio Pupillae.

### Observation

<table>
<thead>
<tr>
<th>Visual Outcome</th>
<th>More HMPL</th>
<th>Upto 636</th>
<th>Upto 360</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>135</td>
<td>16</td>
<td>3</td>
<td>218</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Complications</th>
<th>Total</th>
<th>Posterior Capsular Opacification</th>
<th>Endophthalmitis</th>
<th>Total Retinal Detachment</th>
<th>Eulmatome</th>
<th>Fulminating Corneal Ulceration</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>3 (7%)</td>
<td>1 (7%)</td>
<td>1 (7%)</td>
<td>2 (7%)</td>
<td>2 (7%)</td>
<td>3 (7%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Small Constricted Pupil</th>
<th>Dilated Pupil</th>
<th>Exposure Keratitis With Corneal Opacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (4%)</td>
<td>3 (4%)</td>
<td>3 (7%)</td>
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</table>
Brandt Ocular Leprosy Clinic

A special eye clinic devoted for the Leprosy sufferers in a general Eye Hospital (Haldia Lions Eye Hospital in Eastern India). The Leprosy patients enjoy to share the same facilities like a healthy patient in the same ward and operation theatre of the hospital possibly first ever in the world.

Conclusion

Cataract Surgery with IOL Implantation amongst people affected by MB Leprosy offers good Visual outcome.