A clinical study of Complicated Cataract in Uveitis  

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Abstract

This clinical study of complicated cataract in uveitis was conducted at Regional Institute of Ophthalmology Kozhikode.

AIM: (a) To study [1] the incidence of complicated cataract in various types of uveitis.  
(b) To evaluate the final visual outcome in patients undergoing surgery for complicated cataract.

METHODS:

Cases of complicated cataract secondary to uveitis, attending the OPD during a period of 2 years were included in the study. Those cases of senile and traumatic cataracts were excluded.

RESULTS

The peak incidence of uveitic cataract was between the age group 31 – 40 years. Younger age groups had a rapid progression of cataract. Uveitic cataracts were most commonly associated with chronic anterior uveitis. Most of the patients who underwent cataract surgery for complicated cataract had a substantial improvement in vision.
Introduction

Uveitis is a common problem encountered in diverse forms. It is a chronic and usually protracted condition, requiring long-term treatment with corticosteroids or other immunosuppressive drugs. Cataract formation is a common finding in these patients. The management of cataract associated with uveitis requires special precautions and has its own attendant problems. The challenge lies not only in the technical difficulty of surgery but also in the ability to control the inflammation in the perioperative period.

Aim of the Study


To evaluate the final visual outcome in patients undergoing surgery for complicated cataract.

Materials and Methods

Cases of complicated cataract secondary to uveitis, attending the OPD during a period of 2 years were included in the study. Diagnosis of uveitis was made on the basis of systematic ocular examination. Routine laboratory investigations were done in all cases & specific investigations were done if indicated.

The final diagnosis was based on history, clinical findings and results of laboratory investigations. Morphological appearance of cataract was assessed by slit lamp.

Patients were followed up regularly to assess the control of uveitis and the progression of cataract. Those with visually significant cataract and quiet eyes for a period of at least 3 months underwent cataract surgery. Pre-operative visual acuity and visual acuity at 6 weeks, 6 months and the final follow-up was noted.

OBSERVATIONS AND DISCUSSION

1. Age distribution (Figure 1)

It was found that the peak incidence of uveitic cataract was in the age group 31-40 years and the progression of cataract was found to be more rapid in the younger age group.

2. Sex distribution

Females outnumbered males in this study by 2%. It was also found that anterior uveitis was more common in males and posterior & intermediate uveitis were more common in females.

3. Type of uveitis (Figure 2)

In the present study the type of uveal inflammation most commonly associated with complicated cataract was anterior uveitis (62%), followed by intermediate uveitis (20%), pan uveitis (10%) and posterior uveitis (8%).

4. Pattern of uveitis

Majority of cases with complicated cataract had a chronic form of anterior uveitis (64%). 24.6% had recurrent anterior uveitis. 10% patients showed evidence of cataract after an attack of acute severe anterior uveitis.

5. Duration of history

The duration of history of uveal inflammation in this study varied from 3 weeks to as long as 10 years in this study. Another feature observed was that in cases of panuveitis that cause complicated cataract, the duration of uveal inflammation was very short.

6. Type of Anterior uveitis

83% of cases with complicated cataract had non granulomatous type of anterior uveitis.
7. Type of cataract: (Figure 3)

<table>
<thead>
<tr>
<th>Systemic illness</th>
<th>No of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juvenile rheumatoid arthritis</td>
<td>1</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>4</td>
</tr>
<tr>
<td>Behcets disease</td>
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<tr>
<td>Sarcoidosis</td>
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</table>

In the present study, the most common morphological type of complicated cataract was posterior subcapsular type (74%). 18% were total cataracts, 6% were of anterior subcapsular type. One case (2%) had a sutural cataract.

8. Initial visual acuity: (Figure 4)

36% of cases with complicated cataract had a best corrected visual acuity of 6/6 - 6/18. 25% had a BCVA of 6/24 - 6/60, 24% the vision was reduced to less than 6/60. 11% of cases had a vision of as low as Hand movements and 4% PL vision.

9. Associated systemic illness

Systemic disorders were associated with 18% of uveitic complicated cataract

10. Associated ocular complications

<table>
<thead>
<tr>
<th>OCULAR COMPLICATIONS</th>
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<tbody>
<tr>
<td>Secondary glaucoma</td>
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<td>Exudative RD</td>
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<tr>
<td>Epiretinal membrane</td>
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<tr>
<td>Band keratopathy</td>
<td>1</td>
</tr>
<tr>
<td>Secondary vasculitis</td>
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<tr>
<td>Neovascular glaucoma</td>
<td>1</td>
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</table>

<table>
<thead>
<tr>
<th>TYPE OF SURGERY</th>
<th>TYPE OF IOL</th>
<th>PREOP VISION</th>
<th>POSTOP VISION-6WEEKS</th>
<th>POSTOP VISION – 6 MONTHS</th>
<th>ASSOCIATED COMPLICATIONS</th>
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</thead>
<tbody>
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<td>1MCF</td>
<td>6/36</td>
<td>Immediate post op uveitis</td>
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<tr>
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<td>Single piece PMMA lens</td>
<td>PL</td>
<td>PL</td>
<td>PL</td>
<td>Retinal detachment, Neovascular glaucoma</td>
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<tr>
<td>Phaco</td>
<td>Single piece PMMA lens</td>
<td>6/36</td>
<td>6/12</td>
<td>6/12</td>
<td>Epiretinal membrane, Posterior capsular opacification</td>
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<td>6/6</td>
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<td>6/12</td>
<td>--</td>
<td>Lost follow up</td>
</tr>
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</table>
11. Surgical outcome: (Figure 5)

Cataract surgery with PCIOL implantation was done in 18% of cases. Single piece poly methyl methaacrylate (PMMA) intraocular lens were implanted in all cases.

Among those who underwent cataract surgery, 71% had substantial improvement of visual acuity.

Two cases received preoperative anti-inflammatory medications including topical and systemic steroids starting 3 days prior to surgery. All eyes received topical corticosteroids in tapered doses over 6 weeks postoperatively. Only one case developed severe postoperative uveitis.

Conclusion

Fifty eyes with complicated cataract were studied. The peak incidence of uveitic cataract was between the age group 31 – 40 years. Younger age groups had a rapid progression of cataract. Uveitic cataracts were most commonly associated with chronic anterior uveitis.

(Duration ranged from 3 weeks to as long as 10 years). The most common morphological type of complicated cataract was posterior subcapsular plaque type. In all cases where uveal inflammation was well controlled, the lens opacity remained stationary. Most of the patients who underwent cataract surgery for complicated cataract had a substantial improvement in vision. The causes of poor visual outcome in the rest were presence of posterior segment pathology like cystoid macular edema, epiretinal membrane and retinal detachment.

ILLUSTRATIONS

Figure 1: Age distribution
Figure 2: Type of uveitis
Figure 3: Type of cataract
References


