A CLINICAL STUDY OF ANTERIOR UVEITIS

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ABSTRACT

BACKGROUND

Uveitis, a complex intraocular inflammatory disease results from several aetiological entities. The cause of inflammation might be infectious agent or trauma, but in most cases the underlying mechanism appears to be autoimmune in nature.

Objective of this study is to evaluate the aetiological pattern, treatment and its outcome and complications of anterior uveitis.

MATERIALS AND METHODS

A prospective clinical study was done in the Department of Ophthalmology, Santhiram Medical College, Nandyal during December 2014 to May 2016. All patients between 20 - 80 yrs. of age clinically presenting with anterior uveitis were studied. A thorough clinical evaluation followed by investigations was done to determine the aetiology. Patients were put on specific and non-specific treatment and were followed up for a period of 6 months. Complications were noted.

RESULTS

The aetiology of uveitis remained unknown in most cases (42%). Most common cause was observed to be blunt trauma (20%) followed by phacolytic (12%). Most cases responded well to treatment. Commonest complication was persistent posterior synechiae (23.64%) and cataract was the second common (14.54%).

CONCLUSION

Aetiological diagnosis remains undetermined in majority of cases. A thorough examination and investigation is required in each case to facilitate a final diagnosis. Prompt treatment ensures good visual outcome. Ocular morbidity is common in chronic and recurrent cases.

KEYWORDS

Anterior uveitis, Aetiology, Treatment Complication.

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BACKGROUND

Uveitis is one of the most common forms of intraocular inflammation and affects mainly children and young adults. It includes a large group of intraocular inflammatory diseases of diverse aetiology.¹ The precise cause of anterior uveitis is often obscure and the correct diagnosis is often challenging. The cause of inflammation might be infectious agent or trauma, but in most cases the underlying mechanism appears to be autoimmune in nature.² To enhance understanding and management of ocular inflammation, International Ocular Inflammation Society (IOIS) has been founded.³

On several occasions, it reflects diseases that are developing elsewhere in the body and uveitis may be the first evidence of such systemic diseases.¹ Variation in the spectrum of disease is largely due to complex geographic, ecological, racial, nutritional and socioeconomic differences.

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The anterior uveitis is the most common type of all uveitic entities (57.4%). Based on overall clinical presentation, acute unilateral, non-infectious and non-granulomatous forms occur more frequently. Idiopathic anterior uveitis is more common in all age groups. Mean age at presentation is 38.3 years and commonly affects middle aged (17 - 59 years). It is more common in males (61.3%) compared to females (38.6%).⁴

Anterior uveitis is most common form of uveitis and accounts for an annual incidence rate of about 17 cases per 1,00,000 populations.⁵

Aims and Objectives

To study-

- Clinical presentation.
- Complications.
- Investigations to establish the exact cause and accurate diagnosis.
- Response to treatment and prognosis in terms of visual outcome.

MATERIALS AND METHODS

A prospective clinical study was conducted. The material for this study included, 50 patients between age 20 and 80 years, attending outpatient department, Department of Ophthalmology, Santhiram Medical College, Nandyal between

December 2014 to May 2016 with signs and symptoms of anterior uveitis.

The anterior uveitis following penetrating ocular injuries, corneal ulcer, intraocular surgeries and if associated with intermediate, posterior or panuveitis were excluded from this study. Masquerade syndromes presenting as anterior uveitis has also been excluded.

A standard clinical proforma was filled in all cases, which included salient feature in history, visual acuity using Snellen's visual acuity chart, clinical findings, laboratory investigations and the final aetiology. All patients were examined under slit lamp.

Details on disease severity, laterality, chronicity, ocular signs and associated systemic conditions were noted.

Presentation was considered as unilateral if active inflammation was present in only one eye and bilateral if both eyes presented with active inflammation.

Intraocular inflammation was assigned anterior uveitis based on International Uveitis Study Group Criteria.

The inflammation was defined as acute if symptoms were present for less than three months, chronic if symptoms were present for three months or more and recurrent if two or more episodes of inflammation separated by a disease free period.

Anterior uveitis was defined granulomatous if large keratic precipitates, nodules at pupillary margin (Koepe nodules) or nodules on or within the anterior iris stroma (Busacca nodules) were present.

A short differential diagnosis was made in each case. Subsequently, a tailored laboratory investigation was carried out

Laboratory Investigations

- Complete blood counts,
- Erythrocyte sedimentation rate,
- Urine and Stool examination,
- Mantoux test,
- Serological tests for Syphilis, HIV, HbsAg, Rheumatoid factor, HLA B-27, Serum ACE was done in all cases.

Radiological Investigations

X-ray of chest, lumbosacral and knee joints to rule out sarcoidosis, tuberculosis and other connective tissue disorders. Other special investigations were considered whenever necessary.

Consultation was done with other medical specialties whenever needed.

Final aetiological diagnosis was made based on history, clinical features, laboratory investigations and systemic evaluation by other medical specialties.

The anterior uveitis was considered to have idiopathic aetiology when it was not associated with HLA-B27 haplotype and neither with defined clinical syndromes nor with definitive aetiology.

All patients were treated medically with topical steroids (prednisolone acetate 1%) and topical cycloplegic mydriatics (atropine or homatropine). Steroids frequency was titrated according to severity of uveitis.

Appropriate treatment was given whenever aetiology was known.

Systemic antimicrobials were administered when infectious agent was found to be the cause.

Systemic steroids were used when inflammation was severe, not responding to treatment and patients with macular oedema.

Cases of anterior uveitis with secondary glaucoma were treated with T. Acetazolamide 250 mg BD/TID and/or Timolol 0.5% eye/drops BD along with topical steroids. Each patient was followed up for 6 months. The complications were noted and the response to treatment was recorded and evaluated in each patient.

RESULTS

The present study was conducted in the Department of Ophthalmology, Santhiram Medical College, Nandyal during December 2014 to May 2016; 50 patients in the age group of 20 - 80 yrs. were studied and during the study following observations were made.

Sl. No.	Age (yrs.)	Number	Percentage
1	20 - 30	20	40
2	31 - 40	12	24
3	41 - 50	8	16
4	51 - 60	5	10
5	61 - 70	3	6
6	71 - 80	2	4

Table 1. Age Distribution

Most cases were observed between the age group 20 - 40 years. Less common in above 60 years.

Sl. No.	Sex	Number	Percentage
1	Male	28	56
2	Female	22	44

Table 2. Sex Distribution

Sl. No.	Age (yrs)	Number	Percentage
1	Unilateral	45	90
2	Bilateral	5	10
Total		50	100

Table 3. Laterality

Sl. No.	Occupation	Number	Percentage
1	Labourer	24	48
2	Officials	11	22
3	Housewives	10	20
4	Business	3	6
5	Student	2	4

Table 4. Occupation

In the present study incidence of anterior uveitis was highest amongst the labourers (48%) followed by officials (22%), then housewives (20%) and less common among businessman (6%) and students (4%).

Sl. No.	Presentation	Number	Percentage
1	Acute	38	76
2	Chronic	9	18
3	Recurrent	3	6
Total		50	100

Table 5. Clinical Presentation

In the present study, it was observed that most common presentation was acute anterior uveitis, accounting for 76%, then chronic 18% and only 6% of the patients had recurrent anterior uveitis.

Sl. No.	Type	Number	Percentage
1	Non-granulomatous	45	90
2	Granulomatous	5	10
Total		50	100

Table 6. Type of Inflammation

Sl. No.	Aetiology	Number	Percentage
1	Idiopathic	21	42
2	Blunt trauma	10	20
3	Phacolytic	6	12
4	Herpes zoster	5	10
5	Tuberculosis	3	6
6	Septic focus	1	2
7	Iridocyclitis associated with arthritis	1	2
8	Fuchs' heterochromic iridocyclitis	1	2
9	Leprosy	1	2
10	Inflammatory bowel disease	1	2

Table 7. Aetiological Distribution

In this study, aetiology remain undetermined in 21 (42%) cases and specific diagnosis was reached in 29 (58%) cases. Anterior uveitis following blunt trauma was seen in 10 cases (20%) and phacolytic uveitis was detected in 6 cases (12%). Herpes zoster was responsible in 5 (10%) cases and tuberculosis in 3 (6%) cases. Iridocyclitis associated with arthritis, septic focus, Fuchs' heterochromic iridocyclitis, leprosy and inflammatory bowel disease was observed in 1 case (2%) each.

Sl. No.	Visual Acuity	Before Treatment		After Treatment	
		No. of Eyes	Percentage	No. of Eyes	Percentage
1	PL + PR +	4	7.27	-	-
2	< 6/60	6	10.91	-	-
3	6/60	9	16.36	1	1.82
4	6/36	5	9.09	3	5.45
5	6/24	6	10.91	2	3.64
6	6/18	7	12.73	4	7.27
7	6/12	11	20	6	10.91
8	6/9	6	10.91	14	25.46
9	6/6	1	1.82	25	45.45

Table 8. Visual Acuity before and after Treatment

The above table shows the visual acuity observed in 55 eyes before and after treatment. Before treatment 4 eyes had visual acuity PL+PR+ (7.27%), 6 eyes had less than 6/60 (10.91%), 9 eyes 6/60 (16.36%), 5 eyes 6/36 (9.09%), 6 eyes 6/24 (10.91%), 7 eyes 6/18 (12.73%), 11 eyes 6/12 (20%), 6 eyes 6/9 (10.91%) and 1 eye 6/6 (1.82%). Following treatment, 70.91% of patients regained visual acuity of 6/9 or better. In a few patients, visual acuity improved only

marginally because of associated complications, such as complicated cataract and secondary glaucoma commonly seen in chronic and recurrent cases.

Table 9. Treatment

In the present study, all the 50 patients (100%) were treated with topical steroids and cycloplegics-mydratics. Periocular steroid was given in 9 patients (18%), of which one had bilateral chronic anterior uveitis and received injections to both the eyes. Systemic steroids were used in 18 patients (36%) which included 6 patients of phacolytic uveitis, 5 herpetic uveitis patients, 3 patients of TB, 2 idiopathic and one each in leprosy and psoriatic patient; 13 patients (26%) received antiglaucoma therapy; 3 patients (6%) received anti-TB drugs, antivirals were considered in 5 cases (10%) and all of them had herpetic anterior uveitis. One patient who had already been started on antileprosy therapy was continued. Systemic antibiotics were given in 13 patients (26%) (7 underwent cataract extraction, 4 chronic idiopathic cases, one each in inflammatory bowel disease and septic arthritis).

Majority of patients responded well to medical line of treatment. A case of visually significant complicated cataract underwent synechiaetomy and extracapsular cataract extraction with posterior chamber intraocular lens implantation.

DISCUSSION

The present study was conducted in the Department of Ophthalmology, Santhiram Medical College, Nandyal during the period of December 2014 to May 2016 and fifty cases of anterior uveitis were studied.

The incidence was found to be high between 20 - 40 years of age (64%) and less common over sixty years (10%). Idiopathic anterior uveitis was the commonest cause, which can be explained by high antigenicity found in this age group. In older age group, anterior uveitis was usually of phacolytic origin.

It was observed that males were affected more (56%) compared to females (44%). This may be because men tend to seek medical attention more often than women and socio-economic habits may put male patients at a greater risk for development of anterior uveitis. In Rathinam et al study, 61.3% were males and 38.7% were females. Alejandro Rodriguez et al reported 38.9% male and 61.1% female involvement in their study.

	Present	Rathinam et al ⁴	Alezandro Rodriguez et al ⁶
Males	56%	61.3%	38.9%
Females	44%	38.7%	61.1%

Table 10. Gender Comparison

Majority of patients were labourers (46%). Most common cause of anterior uveitis in labourers was blunt trauma. This may be due to occupational exposure.

Majority of patients came with unilateral presentation (90%). This finding was comparable with that of Rathinam et al study (85.3%). However, there was no significant predilection for either the right or left eye.

	Present	Rathinam et al ⁴
Unilateral	90%	85.3%
Bilateral	10%	14.7%

Table 11. Laterality Comparison

The most common presentation was acute iridocyclitis (76%) than chronic (18%) and recurrent iridocyclitis (6%). Rathinam et al reported 71.9% acute, 24.3% chronic and 3.8% recurrent. The findings are comparable in both the studies.

	Present	Rathinam et al ⁴
Acute	76%	71.9%
Chronic	18%	24.3%
Recurrent	6%	3.8%

Table 12. Chronicity Comparison

In this study, 45 patients (90%) had non-granulomatous inflammation and in 5 patients (10%) it was granulomatous. Findings are comparable with previous studies. Out of 5 granulomatous inflammation, 4 were chronic and 1 patient had recurrent presentation. Granulomatous type of inflammation was observed in three patients of tuberculosis, one patient of herpes and one patient of leprosy.

	Present	Rathinam et al ⁴	Alezandro Rodriguez et al ⁶
Granulomatous	10%	18.8%	12.4%
Non-granulomatous	90%	81.2%	87.6%

Table 13. Comparison of Type of Inflammation

Sl. No.	Aetiology	Present Study (n=50)	Rathinam et al (n=5028)	Singh et al ⁷ (n=607)	Henderly et al ⁸ (n=167)
1	Idiopathic	42	44.6	61.3	43.52
2	Blunt trauma	20	7.7	-	2.52
3	Phacolytic	12	3.5	-	-
4	Herpes zoster	10	8.6	1.8	8.99
5	Tuberculosis	6	4	7.9	-
6	Septic focus	2	-	-	-
7	Iridocyclitis with arthritis	2	7.1	-	-
8	Fuchs' heterochromic iridocyclitis	2	8.4	5.1	6.47
9	Leprosy	2	2.1	0.8	-
10	IBD	2	-	-	1.08

Table 14. Comparison of Aetiological Factors of Present Study with Other Studies

In the present study, blunt trauma (20%) was the most common cause of anterior uveitis followed by phacolytic (12%) aetiology. Although herpes zoster accounted for 10% of the cases, which is comparable with other two studies where it stood first is not the most common in present study. However, it was the most common infectious cause in our study; 6% of the patients had tubercular anterior uveitis which is comparable with Rathinam et al and Singh et al study, whereas there is no data in Henderly et al study. This difference may be because all other studies were conducted at referral centres, where cases usually chronic and recurrent ones are referred from primary and secondary centres. Whereas present study was done in a general ophthalmic clinic and most people were from villages.

No complications were seen in 37 eyes (67.27%). Complications were commonly noted in chronic and recurrent cases. Most common complication observed was persistent posterior synechiae in 13 eyes (23.64%), cataract in 8 eyes (14.54%). Secondary glaucoma was seen in 7 eyes (12.73%), which included 2 herpetic eyes, both the eyes in a psoriatic patient, two idiopathic and one eye in TB anterior uveitis. Iris atrophy was seen in 3 eyes (5.45%), two of them in a leprosy patient and the third was in a herpetic patient and macular oedema was seen in 1 eye (1.82%).

A short differential diagnosis was made in each case after complete ocular and systemic examination with tailored approach to the laboratory investigations.

All patients were treated medically by topical steroids and cycloplegics-mydratics. Treatment with antibiotics, antitubercular drugs, antileprosy and antiviral drugs were considered in appropriate cases. Periocular and systemic steroids were used in cases with severe inflammation, which was not controlled by topical steroids. A case of visually significant complicated cataract underwent synechiaotomy and extracapsular cataract extraction with posterior chamber intraocular lens implantation. Cataract extraction with posterior chamber intraocular lens implantation was done in all cases of phacolytic anterior uveitis. In all cases, surgery was done under the cover of systemic steroids.

Majority of the patients responded well to the medical line of treatment.

Cells and Flare +3 in AC 3x1 mm Beam

Fine KP's

Koeppe Nodules

Busacca Nodules with few Mutton-Fat KP's

Mutton-Fat KP's

Iris Atrophy

Large Old KP's

Iris Bombe with Neovascularisation

Sl. No.	Name	Age (yrs.)	Sex	IP/OP No.	Occupation	Lat.	C/P	Type of Inflm.	Aetiology	Ass. Condit.	Best Corrected Visual Acuity				Complications	Investigations	Treatment			
											RE		LE							
											BT	AT	BT	AT						
1	Sumana	28	F	68004	Official	RE	Acute	NG	Idiopathic		6/9	6/6	6/6	6/6			TS+CM			
2	Basappa	54	M	6863	Labourer	RE	Chronic	G	TB	Pulmonary TB, DM	6/60	6/12	6/6	6/6	PPS, Sec. glu	Chest x-ray+	TS+CM+PS+SS+AG+antiTB			
3	Munaff	36	M	77903	Official	LE	Acute	NG	Idiopathic		6/6	6/6	6/36	6/9			TS+CM			
4	Kamakshi	22	F	126681	Labourer	LE	Acute	NG	Idiopathic		6/6	6/6	6/12	6/6			TS+CM			
5	Shankarappa	64	M	82005	Business	BE	Chronic	G	TB	Pulmonary TB	CF2m	6/36	CF1m	6/36	PPS & PSC, BE	Chest x-ray+	TS+CM+SS+antiTB+SA+ECCE(BE)			
6	Mohamad	42	M	54936	Official	RE	Acute	NG	Trauma		6/36	6/6	6/6	6/6			TS+CM			
7	Ramani	25	F	155721	Labourer	LE	Acute	NG	Trauma		6/6	6/6	6/12	6/6			TS+CM			
8	Muniyamma	35	F	116373	House wife	RE	Acute	NG	Idiopathic	Myopia	6/36	6/9	6/6	6/6			TS+CM			
9	Daruka	29	M	44885	Labourer	RE	Acute	NG	Herpes zoster	Skin lesions	6/12	6/6	6/6	6/6		Clinical Diagnosis	TS+CM+SS+Antiviral			
10	Panchakshari	27	M	10571	Labourer	LE	Acute	NG	Trauma		6/6	6/6	6/18	6/6			TS+CM			
11	Nagarathna	33	F	93718	House wife	RE	Acute	NG	Idiopathic		6/18	6/9	6/6	6/6			TS+CM			
12	Rudreshi	34	M	38592	Labourer	RE	Acute	NG	Herpes zoster	Skin lesions	6/24	6/9	6/6	6/6	IA	Clinical Diagnosis	TS+CM+SS+antiviral			
13	Sundharamma	30	F	41321	Official	BE	Recurrent	NG	IAA	Psoriatic arthritis	6/24	6/18	6/60	6/18	Sec. glu BE	HLA-B27+	TS+CM+PS (LE)+SS+AG			
14	Papanna	65	M	26059	Labourer	LE	Acute	NG	Phacolytic	SIMC (RE), HTN	6/36	6/36	PL+ PR+	6/12			TS+CM+SS+AG+SA+ECCE,PCIOL (LE)			
15	Jagadeesh	31	M	116772	Labourer	LE	Acute	NG	Idiopathic		6/6	6/6	6/12	6/6			TS+CM			
16	Govinda	20	M	119217	Student	RE	Acute	NG	Trauma		6/9	6/6	6/6	6/6			TS+CM			
17	Gouramma	57	F	19261	House wife	RE	Acute	NG	Phacolytic	PSC (LE)	HM+	6/9	6/12	6/12			TS+CM+SS+AG+SA+SICS,PCIOL (RE)			
18	Jayanthi	45	F	13734	House wife	BE	Chronic	NG	Idiopathic		CF2m	6/9	6/60	6/24	PPS & PSC, BE		TS+CM+PS(BE)+SS+AG+SA+ECCE (RE)			
19	Satywathi	40	F	23498	Official	RE	Acute	NG	Idiopathic		6/12	6/6	6/6	6/6			TS+CM			
20	Yogesh	23	M	129049	Labourer	RE	Acute	NG	Idiopathic		6/24	6/9	6/6	6/6			TS+CM			
21	Meenakshamma	72	F	34491	House wife	LE	Acute	NG	Phacolytic	SIMC (RE), DM	6/60	6/36	PL+ PR+	6/9			TS+CM+SS+AG+SA+SICS,PCIOL (LE)			
22	Prahalhad	44	M	25420	Official	LE	Acute	NG	Idiopathic		6/6	6/6	6/9	6/6			TS+CM			
23	Zarrena	24	F	96437	Labourer	RE	Acute	NG	IBD		6/12	6/6	6/6	6/6		HLA-B27+	TS+CM+SA			
24	Shanthakumar	25	M	11417	Labourer	RE	Acute	NG	Trauma		6/18	6/6	6/6	6/6			TS+CM			
25	Lakshmana	37	M	27892	Labourer	RE	Chronic	NG	Herpes zoster		6/60	6/12	6/6	6/6	PPS, Sec glu		TS+CM+SS+ AG+Antiviral			
26	Bhaskar	50	M	49371	Official	RE	Chronic	NG	Septic foci	Arthritis R knee, DM	6/24	6/9	6/6	6/6		Synovial fluid C/S+	TS+CM+PS+SA			
27	Jayashree	21	F	26381	Student	LE	Acute	NG	Idiopathic		6/6	6/6	6/6	6/6			TS+CM			
28	Girijamma	46	F	92168	Labourer	BE	Recurrent	G	TB	Pulmonary TB	6/18	6/12	6/60	6/36	PPS BE & PSC (LE)	Chest x-ray+	TS+CM+PS(LE)+SS + antiTB			
29	Shanthamma	55	F	32229	House wife	RE	Acute	NG	Phacolytic	PSC (LE), DM	CF1/2m	6/9	6/24	6/24			TS+CM+SS+AG+SA+S+ECCE, PCIOL (RE)			
30	Barkat Ali	30	M	87639	Business	LE	Recurrent	NG	Idiopathic		6/6	6/6	6/36	6/9	Sec. glu		TS+CM+PS+SS+AG+SA			
31	Buden	26	M	39452	Labourer	RE	Acute	NG	Trauma		6/12	6/6	6/6	6/6			TS+CM			
32	Pankaja	38	F	2894	Official	LE	Chronic	NG	Idiopathic		6/6	6/6	6/60	6/18	PPS, PSC (LE)	Yield less	TS+CM+PS+SA			
33	Manjunath	48	M	40563	Official	RE	Acute	NG	Herpes zoster	Skin lesions	6/18	6/6	6/6	6/6		Clinical Diagnosis	TS+CM+SS+Antiviral			
34	Sharanappa	22	M	29748	Labourer	LE	Acute	NG	Trauma		6/6	6/6	6/9	6/6			TS+CM			
35	Susheelamma	58	F	206934	House wife	RE	Acute	NG	Phacolytic	SIMC (LE)	PL+ PR+	6/9	6/60	6/60			TS+CM+SS+AG+SA+S+SICS,PCIOL (RE)			
36	Venkatalakshmi	40	F	46253	House wife	RE	Acute	NG	Idiopathic		6/36	6/12	6/6	6/6	ME		TS+CM+PS+NSAIDS			
37	Giriyappa	26	M	50062	Labourer	RE	Acute	NG	Idiopathic		6/12	6/6	6/6	6/6			TS+CM			
38	Chandrappa	62	M	61248	Business	RE	Acute	NG	Phacolytic	SIMC (LE), HTN	PL+ PR+	6/18	6/24	6/24			TS+CM+SS+AG+SA+S+SICS,PCIOL (RE)			

39	Ambuja	43	F	44380	Labourer	LE	Chronic	G	Herpes zoster	HIV	6/6	6/6	6/60	6/12	PPS, Sec. glu	Clinical Diagnosis	TS+CM+SS+ AG+antiviral
40	Jaganath	28	M	55486	Labourer	LE	Acute	NG	Trauma		6/6	6/6	6/12	6/6			TS+CM
41	Rangamma	37	F	114559	Labourer	LE	Acute	NG	Idiopathic		6/6	6/6	6/9	6/6			TS+CM
42	Shambhulingappa	75	M	87542	Labourer	BE	Chronic	G	Leprosy	Leprosy	6/60	6/36	6/60	6/24	PPS, IA& PSC BE	Confirmed case	TS+CM+SS+ anti-Leprosy
43	Kareemsab	24	M	59716	Labourer	LE	Acute	NG	Idiopathic		6/6	6/6	6/18	6/6			TS+CM
44	Suresh	27	M	24369	Official	RE	Acute	NG	Idiopathic		6/12	6/6	6/6	6/6			TS+CM
45	Lingamma	45	F	61748	House wife	RE	Acute	NG	FHI		6/9	6/6	6/6	6/6			TS+CM
46	Nagamma	39	F	84250	Labourer	LE	Acute	NG	Trauma		6/6	6/6	6/24	6/9			TS+CM
47	Nijaguna	23	M	21447	Labourer	LE	Acute	NG	Idiopathic		6/6	6/6	6/18	6/6			TS+CM
48	Krishnaveni	60	F	413	House wife	RE	Chronic	NG	Idiopathic	PSC (LE), DM	CF4m	6/60	6/24	6/24	PPS, Sec. glu		TS+CM+PS+AG+SA
49	Niaz noorulla	32	M	89273	Official	LE	Acute	NG	Idiopathic		6/6	6/6	6/24	6/6			TS+CM
50	Channabasava	21	M	98261	Labourer	LE	Acute	NG	Trauma		6/6	6/6	6/12	6/6			TS+CM

CONCLUSION

This is a prospective study done during December 2014 to May 2016. We studied 50 cases of anterior uveitis with emphasis on evaluating the possible aetiology, associated complications and treatment outcome.

1. Anterior uveitis is a relatively common ocular condition.
2. In the present study, males were affected more than the females.
3. Patients in the age group of 20 - 40 years were commonly involved.
4. Labourers were by far the commonly involved group in this study; blunt trauma was the leading cause in them and this may be due the risk of injury at their work place. Next common group was that of officials and most of them had idiopathic disease.
5. Majority of the patients had acute presentation.
6. 90% of the patients presented with unilateral ocular involvement, among them right eye involvement was slightly more than the left eye involvement in the ratio of 5:4. Both eye involvement was seen in 10% of the patients, all of them had either chronic or recurrent disease and four of them had identifiable aetiology.
7. Nongranulomatous inflammation was the commonest form accounting for 90% of the cases. Granulomatous inflammation was seen only in chronic cases excepting one patient who had recurrent anterior uveitis.
8. Despite of efforts, diagnosis remained obscure in 42% of the cases, blunt trauma was the most common identifiable cause in 20% of the cases, more so in labourers. Herpetic aetiology topped the list of infectious cause followed by tuberculosis. Septic foci, iridocyclitis associated with arthritis, Fuchs'.
9. Heterochromic iridocyclitis, leprosy, inflammatory bowel disease are all relatively less common causes of anterior uveitis.
10. The challenge in anterior uveitis is to develop tailored laboratory investigations that will facilitate a diagnosis. This can be done by first considering the probable diagnosis based on the patient profile and then performing tailored laboratory evaluation.
11. A thorough systemic examination should be done to rule out any systemic disease, as it may be an early manifestation of systemic disease.
12. Majority of anterior uveitis patients respond to medical line of treatment.

13. Chronicity increases the risk of complications as does delay in receiving appropriate therapy, but early recognition and treatment of patients who are prone to recurrences can improve their outcome.
14. Early diagnosis and treatment of patients results in good visual prognosis and is the key in management of anterior uveitis.

Summary

- A clinical prospective study of 50 patients clinically presenting with anterior uveitis was done.
- All patients underwent a thorough systemic and ocular examination.
- Tailored laboratory investigations were done in each case to facilitate diagnosis.
- Patients were put on treatment and were followed up at regular intervals over a period of 6 months.
- Aetiology remained undetermined in most cases. Most common cause in present study was blunt trauma followed by phacolytic anterior uveitis.
- Most common complications were persistent, posterior synechiae and complicated cataract.
- Majority of patients responded well to treatment.
- 70.91% of the patients regained visual acuity of 6/9 or better.

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