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RESEARCH ARTICLE

CLINICAL PROFILE OF ACUTE ANTERIOR UVEITIS IN A TERTIARY HEALTH CARE CENTRE IN WESTERN ODISHA.

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Key words:-

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Abstract

Aim: The aim of our study is to find out the clinical profile of patients presented with acute anterior uveitis attending the Ophthalmology Department in a tertiary health care centre in western odisha.

Materials and Methods: A subset of 102 patients presented with acute anterior uveitis attending the Ophthalmology Department of VSS Medical College, Burla, Sambalpur over a period of two years were included.

Results: In our study, it was found that acute anterior uveitis is noticed in 2.94% in 10 – 20 years age, 21.57 % in 21 – 30 years age group, 40.20 % in 31 – 40 years age, 14.71% in 41 – 50 years age, 10.78% in 51 – 60 years age, 9.80 % in >60 years age group, males were affected more than females of ratio 1.4:1, unilateral presentation (91.18%) is commoner than bilateral presentation (8.82%), nongranulomatous type of inflammation (93.14%) is more frequent presentation than granulomatous (6.86%). The etiology is found to be idiopathic in 31.37 % cases followed by phacolytic (20.59%) cases, herpetic iridocyclitis (16.67%), blunt trauma (13.73%) cases, iridocyclitis with arthritis (6.86%) cases, tuberculosis (5.88%) cases and inflammatory bowel disease (0.98%) cases.

Conclusion: From our study it was concluded that acute anterior uveitis is most commonly involved in middle aged person with increased incidence in males with unilateral and nongranulomatous type of idiopathic etiology.

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Introduction:-

Uveitis" is one of the most common forms of intraocular inflammation involving the uveal tract and affects mainly children and young adults. It includes a large group of intraocular inflammatory diseases of diverse etiology. On several occasions, it reflects diseases that are developing elsewhere in the body and uveitis may be the first evidence of such systemic diseases¹. Variation in the spectrum of disease is largely due to complex geographic, ecological, racial, nutritional, and socioeconomic differences. The anterior uveitis is the most common type of all uveitic

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entities. On the basis of overall clinical presentation is acute, unilateral, noninfectious and nongranulomatous forms². The precise cause of anterior uveitis is often obscure and the correct diagnosis is often challenging. The cause of inflammation might be infections agent or trauma, but in most cases the underlying mechanism appears to be autoimmune in nature³. In order to enhance understanding and management of ocular inflammation International Ocular Inflammation Society (IOIS) has been founded⁴.

The aim of our study is to find out the clinical profile of all patients presenting with acute anterior uveitis attending the Ophthalmology Department of VSS Medical College, Burla, Sambalpur over a period of two years.

Materials and Methods:-

A prospective clinical study was conducted between December 2012 to October 2014. A standard clinical proforma was filled in all cases, which included salient feature in history, visual acuity using Snellens visual acuity chart, clinical findings, laboratory investigations, and the final etiology. The anterior uveitis associated with penetrating ocular injuries, corneal ulcer, intraocular surgeries, intermediate, posterior or panuveitis and masquerade syndrome were excluded from the study. 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 as anterior uveitis which include iritis, anterior cyclitis, iridocyclitis 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. A short differential diagnosis was made in each case. Subsequently, a tailored laboratory investigation was carried out. Investigations included, total and differential counts, erythrocyte sedimentation rate, urine and stool examination, Mantoux test, Serological tests for syphilis, HIV, rheumatoid factor were done in all cases. Radiological investigations included x-ray of chest, lumbosacral and knee joints. Other special investigations were considered whenever necessary like skin tests, ELISA for IgG, IgM, etc. Consultation was done with other medical specialities, whenever needed. Final etiological diagnosis was made based on history, clinical features, laboratory investigations and systemic evaluation by other medical specialities. The anterior uveitis was considered to have idiopathic etiology when it was not associated with HLA-B27 haplotype and neither with defined clinical syndromes nor with definitive aetiology⁵.

Results:-

This study was conducted in the Department of Ophthalmology, V.S.S Medical College & Hospital, Burla, Sambalpur, Odisha between December 2012 to October 2014. 102 patients in the age group of 10 – 80 years were included and during the study following observations were found.

Table 1:- Age distribution.

Sl. No.	Age (yrs)	Number	Percentage
1	10 – 20	3	2.94
2	21 – 30	22	21.57
3	31 – 40	41	40.20
4	41 – 50	15	14.71
5	51 – 60	11	10.78
6	> 60	10	9.80

In the present study anterior uveitis accounted to 2.94% in 10 – 20 years age, 21.57 % in 21 – 30 years age group, 40.20 % in 31 – 40 years age, 14.71% in 41 – 50 years age, 10.78% in 51 – 60 years age, 9.80 % in >60 years age group [Table-1].

Table 2:- Sex distribution

Sl. No.	Sex	Number	Percentage
1	Male	59	57.84
2	Female	43	42.16

As observed in the [Table-2], males accounted higher (57.84%) than that of females (42.16%).

Table 3:- laterality distribution

Sl. No.	Laterality	Number	Percentage
1	Unilateral	93	91.18
2	Bilateral	9	8.82

In the present study unilateral involvement was seen in 91.18 % as compared to bilateral involvement in 8.82 % of cases. [Table 3]

Table 4:- Type of inflammation

Sl. No.	Type	Number	Percentage
1	Nongranulomatous	95	93.14
2	Granulomatous	7	6.86

In the present study 95 (93.14 %) patients had non granulomatous inflammation and as compared to granulomatous inflammation 07 (6.86 %) patients. [Table 4]

Table 5:- etiology

Sl. No.	Etiology	Number	Percentage
1	Idiopathic	32	31.37
2	Phacolytic	21	20.59
3	Blunt trauma	14	13.73
4	Herpes	17	16.67
5	Tuberculosis	6	5.88
6	Septic focus	2	1.96
7	Iridocyclitis with arthritis	7	6.86
8	Leprosy	2	1.96
9	Inflammatory bowel disease	1	0.98

In this study aetiology remain undetermined in 32 (31.37 %) cases followed by blunt trauma was seen in 14 cases (13.73 %) and phacolytic uveitis was detected in 21 cases (20.59 %). Herpes zoster was responsible in 17 (16.67 %) cases and tuberculosis in 06 (5.88 %) cases. Iridocyclitis associated with arthritis in 07 (6.86 %) cases, Septic focus in 02 (1.96 %) cases, leprosy in 02 (1.96 %) cases and inflammatory bowel disease was observed in 01 case (0.98%) each. [Table 5]

Discussion:-

The incidence was found to be high between 21 – 40 years of age (61.77%) and less common over sixty years (9.8%) as compared to Rathinam et al² age incidence is <16 years (7.34%), 17-59 years (83.37%) and >60 years (9.29%). Alejandro Rodriguez et al⁹ reported 31-40 years (35%) followed by 61-70 years (25%), 51-60 years (20%), 71-80 years (10%), 41-50years (5%) and 21-30 years (5%) of age group.

In our study males were affected more (57.84 %) compared to females (42.16 %). 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 as compared to Rathinam et al study 61.3% were males and 38.7% were females and Alejandro Rodriguez et al reported 38.9% male and 61.1% female involvement in their study.

In our present study unilateral involvement was seen in 91.18 % as compared to bilateral involvement in 8.82 % of cases. In our study 95 patients (93.14%) had non-granulomatous inflammation and in 7 patients (6.86%) it was granulomatous. Findings are comparable with previous studies.

In the present study idiopathic (31.37%) was the most common cause of anterior uveitis followed by phacolytic (20.59%) aetiology. Although herpes zoster accounted for 16.67% 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. 5.88 % of the patients had tubercular anterior uveitis which is comparable with Rathinam et al and Singh et al⁸ study, where as there is no data in Henderly et al¹⁰ study. This difference may be because all other studies were conducted at referral centers, where cases usually chronic and recurrent ones, are referred from primary and secondary centers. Whereas present study was done in a general ophthalmic clinic and most people were from villages.

Conclusion:-

In this study it was found that acute anterior uveitis is more common in 21-40 years age group (61.77%) and less common over 60 years (9.8%), males were affected more than females of ratio 1.4:1, unilateral presentation (91.18%) is commoner than bilateral presentation (8.82%) and nongranulomatous type of inflammation (93.14%) is more frequent presentation than granulomatous (6.86%). The etiology is mainly idiopathic in 31.37 % cases and specific diagnosis was reached in 68.63% cases. However further research is required with quite sufficient number of cases to reveal definite etiology, management and to decrease the morbidity conditions associated with it.

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