Original Article

A study of clinical profile and factors associated with uveitis at tertiary health care center

Vijay Kumar Srivastava[1*], Garima Yadav[2]

[1]Associate Professor, [2]Jr. Resident, Department of Ophthalmology, Rajarajeshwari Medical College, Bangalore, Karnataka, INDIA.
Email: vks_4186@rediffmail.com

Abstract

Introduction: Uveitis is a relatively common eye disease and one of the most important causes for visual impairment throughout the world. **Aims and Objectives:** To Study clinical profile and factors associated with Uveitis at tertiary health care center. **Methodology:** This was cross-sectional study at the Ophthalmology Department of Tertiary health care center in the Patients of Uveitis. All the Patients during the year 2014 with the diagnosis of Uveitis were included into the study. Ophthalmic examinations and necessary laboratory tests were done for the confirmation of diagnosis and etiology also necessary demographic and risk factor history was taken. In the study duration there were 138 patients enrolled into the study. **Result:** Majority of the patients were in the age group of 30-40 i.e. 26.81% followed by 40-50 - 20.28%; in 20-30 -19.56%; 10-20- 17.39% and in >50 were 12.31% and in <10 were 3.62%. The majority of the Patients were Females i.e. 56.52% and Males were 43.47%. Most common type was Anterior Uveitis in 59.42% (Its etiology were Idiopathic iridocyclitis-16.67%; Glaucomatocyclitic crisis-13.76%; Traumatic iridocyclitis-7.97% etc.) followed by Posterior Uveitis having etiology of Toxoplasmosis i.e. 2.17%, Associated with JRH -2.17%, etc. Last was Intermediate Uveitis with etiology of Idiopathic in 1.44% followed and TB in 1.44%.etc. **Conclusion:** It can concluded from our study that in Uveitis most common affected age was young age and common in females. Among types Anterior uveitis was most common followed by posterior uveitis and intermediate uveitis was least common. The risk factors associated in our study were H/o Diabetes, Smoking, immunocompromised Disease, Cataract, Ankylosing Spondylitis, Psoriasis, TB etc.
Keywords: Uveitis, Iridocyclitis, Anterior Uveitis, Intermediate Uveitis, Posterior Uveitis, Ankylosing Spondylitis.

[*]**Address for Correspondence:**
Dr. Vijay Kumar Srivastava, Associate Professor, Department of Ophthalmology, Rajarajeshwari Medical College, Bangalore, Karnataka, INDIA.
Email: vks_4186@rediffmail.com
Received Date: 19/03/2015 Revised Date: 02/04/2015 Accepted Date: 26/04/2015

Access this article online	
Quick Response Code:	Website: www.statperson.com
	DOI: 28 April 2015

INTRODUCTION

Uveitis is a relatively common eye disease and one of the most important causes for visual impairment throughout the world. The causes of uveitis are numerous, including infection, trauma, noninfectious systemic or ocular disease, and masquerade syndromes. Differences in social economic, environment, genetic factors and standards of living all make clinical patterns and characteristics varied in different populations[1-4]. Uveitis is a general term describing inflammation of the uveal tract with or without involvement of adjacent structures. It may be caused by a variety of infectious or non-infectious disorders and is frequently associated with a systemic disease. It is believed that uveitis accounts for up to 10% of legal blindness in the United States.[5,6] Uveitis is classified anatomically into anterior, intermediate, posterior, and panuveitic forms-based on the part of the eye primarily affected.[7] Prior to the twentieth century, uveitis was typically referred to in English as "ophthalmia."[8] Anterior uveitis includes iridocyclitis and iritis. Iritis is the inflammation of the anterior chamber and iris. Iridocyclitis presents the same symptoms as iritis, but also includes inflammation in the ciliary body. Anywhere from two-thirds to 90% of uveitis cases are anterior in location. This condition can occur as a single episode and subside with proper treatment or may take on a recurrent or chronic nature. Intermediate uveitis, also known as pars planitis, consists of vitritis-which is inflammation of

How to site this article: Vijay Kumar Srivastava, Garima Yadav. A study of clinical profile and factors associated with uveitis at tertiary health care center. *International Journal of Recent Trends in Science and Technology* April 2015; 14(3): 762-764 http://www.statperson.com (accessed 30 April 2015).

cells in the vitreous cavity, sometimes with snowbanking, or deposition of inflammatory material on the pars plana. There are also "snowballs," which are inflammatory cells in the vitreous. Intermediate uveitis is less common and generally idiopathic, however TB remains an important cause.[9] Posterior uveitis or chorioretinitis is the inflammation of the retina and choroid.

MATERIAL AND METHODS

This was cross-sectional study at the Opthalmology Department of Tertiary health care center in the Patients of Uveitis. All the Patientsduring the year 2014 with the diagnosis of Uveitis were included into the study. Ophthalmic examinations and necessary laboratory tests were done for the confirmation of Diagnosis and etiology also necessary demographic and risk factor history was also taken. In the study duration there were 138 patients enrolled into the study.

RESULT

Table 1: Distribution of the Patients as per the Age

Age	No.	Percentage (%)
<10	5	3.62%
10-20	24	17.39%
20-30	27	19.56%
30-40	37	26.81%
40-50	28	20.28%
>50	17	12.31%
Total	**138**	**100%**

The majority of the patients were in the age group of 30-40 i.e. 26.81% followed by 40-50 - 20.28%; in 20-30- 19.56%; 10-20- 17.39% and in >50 were 12.31% and in <10 were 3.62%.

Table 2: Distribution of the Patients as per the Sex

Sex	No.	Percentage (%)
Female	78	56.52%
Male	60	43.47%
Total	**138**	**100%**

The majority of the Patients were Females i.e. 56.52% and Males were 43.47%.

Table 3: Distribution of the Patients as per the Etiology

Cause/ Etiology	No.	Percentage (%)
Anterior	**82**	59.42
Idiopathic iridocyclitis	23	16.67
Glaucomatocyclitic crisis	19	13.76
Traumatic iridocyclitis	11	7.97
Ankylosing spondylitis	9	6.52
Fuchs heterochromic iridocyclitis	8	5.79
Psoriatic arthritis	5	3.62
Juvenile idiopathic arthritis	4	2.89
Intraocular lens related uveitis	3	2.17
Intermediate	**9**	6.52
Idiopathic	**2**	1.44
TB	2	1.44
HSV	1	0.72
HIV	1	0.72
Psoriasis	1	0.72
Behcet disease	1	0.72
Ankylosing Spondylitis	1	0.72
Posterior Uveitis	**13**	9.42
Toxoplasmosis	3	2.17
Associated with JRH	3	2.17
TB	2	1.44
Associated with VKH disease	2	1.44
Associated with IBD	2	1.44
Behcet disease	1	0.72

Most common Cause /Etiology was Anterior Uveitis in 59.42% (Its etiology were Idiopathic iridocyclitis - 16.67%; Glaucomatocyclitic crisis-13.76%; Traumatic iridocyclitis-7.97%, Ankylosing spondylitis-6.52%; Fuchs heterochromiciridocyclitis-5.79%, Psoriatic arthritis-3.62%, Juvenile idiopathic arthritis Zoster/simplex keratouveitis in 2.89%, Intraocular lens related uveitis were 2.17%). The Second most Common type was Posterior Uveitis having etiology of Toxoplasmosis i.e. 2.17%, Associated with JRH -2.17%, TB-1.44%, Associated with VKH disease -1.44, Associated with IBD-1.44, Behcet disease-0.72%. and Last was IntermediateUveitis with etiology of Idiopathic in 1.44% followed by TB in 1.44%, HSV in 0.72%, HIV in 0.72%, Psoriasis in 0.72 %, Behcet disease in 0.72%, Ankylosing Spondylitis in 0.72%.

Table 4: Distribution of the Patients as per associated Risk factors

Risk factors	No.	Percentage (%)
H/o Diabetes	35	25.36%
H/o Smoking	29	21.01%
H/o immunocompromised Disease	19	13.76%
H/o Cataract	12	8.69%
H/o Ankylosing Spondylitis	9	6.52%
H/o Psoriasis	5	3.62%
H/o TB	4	2.89%

The most common risk factors observed were H/o Diabetes 25.36%; H/o Smoking in 21.01% H/o immunocompromised Disease in 13.76%; H/o Cataract in 8.69%; H/o Ankylosing Spondylitis in 6.52%; H/o Psoriasis in 3.62%; H/o TB in 2.89%.

DISCUSSION

In our study we have found that The majority of the patients were in the age group of 30-40 i.e. 26.81% followed by 40-50 - 20.28%; in 20-30 -19.56%; 10-20- 17.39% and in >50 were 12.31% and in <10 were 3.62%.l ; In both the developed and developing world, uveitis is most often seen in adults[1,3]. The mean age of first

presentation with uveitis in previous clinic-based surveys was reported to range between 35 and 45y[1-3,11]. The majority of the Patients were Females i.e. 56.52% and Males were 43.47. Most common Cause /Etiology was Anterior Uveitis in 59.42% (Its etiology were Idiopathic iridocyclitis -16.67%; Glaucomatocyclitic crisis-13.76%; Traumatic iridocyclitis-7.97%, Ankylosing spondylitis -6.52%; Fuchs heterochromiciridocyclitis -5.79%, Psoriatic arthritis-3.62%, Juvenile idiopathic arthritis in 2.89%, Intraocular lens related uveitis were 2.17%). This was similar to KM SudhaMadhavi[10] they found Theaetiology of uveitis remained unknown in most cases (42%). Most common cause was observed to be blunt trauma (20%) followed by phacolytic (12%). The Second most Common type was Posterior Uveitis washaving etiology of Toxoplasmosis i.e. 2.17%, Associated with JRH-2.17%, TB-1.44%, Associated with VKH disease -1.44, Associated with IBD- 1.44, Behcet disease -0.72%. This was similar to *Mitchell et al* [10] and Imtiaz Ali Shah[16]. In the Last was Intermediate Uveitis with etiology of Idiopathic in 1.44% followed by TB in 1.44%, HSV in 0.72%, HIV in 0.72%, Psoriasis in 0.72 %, Behcet disease in 0.72%, Ankylosing Spondylitis in 0.72% this was similar to Helen Mi et al [9]they found Most wereidiopathic (59.1%) in etiology, followed by tuberculosis (TB) (15.2%) and rare causes were Psoriasis and Bechet's disease etc. In our study we found The most common risk factors observed were H/o Diabetes 25.36% ; H/o Smoking in 21.01%, H/o immunocompromised disease in 13.76%; H/o Cataract in 8.69%; H/o Ankylosing Spondylitis in 6.52%; H/o Psoriasis in 3.62%; H/o TB in 2.89% this in confirmation with Phoebe Lin[15]A history of smoking is significantly associated with all anatomic subtypes of uveitis and infectious uveitis. The association was greater in patients with intermediate uveitis and panuveitis with CME compared with those without CME. The odds of a smoker having Uveitis (ocular inflammation) were 2.2-fold that of a patient who had never smoked (95% confidence interval [CI], 1.7–3.0; P<0.001).

CONCLUSION

It can concluded from our study that in Uveitis most common affected age was young age and common in females in types Anterior uveitis was most common followed by posterior uveitis and intermediate uveitis was least common.The risk factors associated in our study were H/o Diabetes, Smoking, immunocompromised Disease, Cataract, Ankylosing Spondylitis, Psoriasis, TB etc.

REFERENCES

1. London NJ, Rathinam SR, Cunningham ET Jr. The epidemiology of uveitis in developing countries. 2010;50(2):1-17
2. Rathinam SR, Namperumalsamy P. Global variation and pattern changes in epidemiology of uveitis. 2007;55(3):173-183
3. Chams H, Rostami M, Mohammadi SF, Ohno S. Epidemiology and prevalence of uveitis: review of literature. 2009;21 (4): 4-16
4. de Smet MD, Taylor SR, Bodaghi B, Miserocchi E, Murray PI, Pleyer U, Zierhut M, Barisani-Asenbauer T, LeHoang P, Lightman S. Understanding uveitis: the impact of research on visual outcomes. 2011;30(6):452-470.
5. Jerndal T, Lundström M. 330 trabeculectomies–a follow-up study through 1/2-3 years. Acta Ophthalmol (Copenh) 1977 Feb;55(1):52-62.
6. Oruc S, Kaplan AD, Galen M, Kaplan HJ. Uveitis referral pattern in a Midwest University Eye Center. OculImmunolInflamm. 2003;11:287–298.
7. Jabs DA, Nussenblatt RB, Rosenbaum JT. Standardization of Uveitis Nomenclature (SUN) Working Group. Standardization of uveitis nomenclature for reporting clinical data.Results of the First International Workshop. Am J Ophthalmol 2005;140:509-516.
8. Leffler CT, Schwartz SG, Stackhouse R, Davenport B, Spetzler K (2013)."Evolution and impact of eye and vision terms in written English".JAMA Ophthalmol.131 (12): 1625–31 doi:10.1001/jamaophthalmol.2013.917. PMID 24337558.
9. Helen Mi, SuL.Ho, Wee K. Lim, Elizabeth P. Y. Wong, Stephen C. Teoh. Trends in Patterns of Intermediate Uveitis in a Tertiary Institution in Singapore.PLOS ONE. 2014; 9(3):1-9.
10. Mitchell, Richard Sheppard; Kumar, Vinay; Abbas, Abul K.; Fausto, Nelson. Robbins Basic Pathology. Philadelphia: Saunders. Table 5-7 in: ISBN 1-4160-2973-7.8th edition.
11. Sittivarakul W, Bhurayanontachai P, Ratanasukon M. Pattern of uveitis in a university-based referral center in southern Thailand. 2013;21(1):53-60
12. Kianersi F, Mohammadi Z, Ghanbari H, Ghoreyshi SM, Karimzadeh H, Soheilian M. Clinical patterns of uveitis in an Iranian Tertiary Eye-care Center. 2014
13. Yang P, Zhang Z, Zhou H, Li B, Huang X, Gao Y, Zhu L, Ren Y, Klooster J, Kijlstra A. Clinical patterns and characteristics of uveitis in a tertiary center for uveitis in China. 2005;30(11):943-94
14. Kitamei H, Kitaichi N, Namba K, Kotake S, Goda C, Kitamura M, Miyazaki A, Ohno S. Clinical features of intraocular inflammation in Hokkaido, Japan. 2009;87(4):424-428
15. Phoebe Lin, Allison R. Loh, Todd P. Margolis. Cigarette Smoking as a Risk Factor for Uveitis.Opthalmology. March 2010; 117, (3): 585–590.
16. Imtiaz Ali Shah, Zuberi BF, Sangi SA, Abbasi SA: Systemic Manifestations of Iridocyclitis: Pak J Ophthalmol 1999 Vol. 15, No. 2; p,61-64

Source of Support: None Declared
Conflict of Interest: None Declared