



Study of clinical profile, prevalence and pattern of uveitis in a tertiary care centre

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Abstract

Aim: Uveitis is a sight threatening disease. The study aims to report the pattern of uveitis in tertiary care centre in Jammu according to anatomical classification and etiology and compare it with other studies.

Material and Methods: A cross sectional study was done from Nov 2018-Oct 2019 and patients were classified according to anatomical classification based on SUN criteria. A detailed history, general physical, ophthalmological and laboratory tests were done.

Results: Prevalence of uveitis was 0.64%. Anterior uveitis was the most common anatomical type of uveitis (62.5%) followed by posterior (20.83%), panuveitis (10%) and intermediate uveitis (6.66%). Specific diagnosis was made in 39.16%.

Keywords: anterior uveitis, posterior uveitis, intermediate uveitis, behcet syndrome

Introduction

Uveitis represents the inflammation of middle vascular tunic of eye i.e. iris, ciliary body and choroid along with adjoining ocular structures. It can be self limiting with favourable prognosis or can be progressive with vision threatening complications. It accounts for 10 % of visual handicap in the western world. It can occur in any age group but it is most common between 20 to 44 years. It can be idiopathic, infectious, autoimmune, traumatic. Uveitis is anatomically classified according to Standardization of Uveitis Nomenclature given by International Uveitis Study Group. The average incidence of uveitis in India is 14-17/1,00,000. Anterior uveitis is the most common anatomical type. It can be unilateral or bilateral with pain, photophobia, circumcorneal congestion, blepharospasm, lacrimation, defective vision and anterior chamber cells and flare. It can be iritis, cyclitis or iridocyclitis. Intermediate uveitis includes pars planitis, posterior cyclitis, hyalitis and basal retinochoroiditis. Young adults are most commonly affected. It has insidious onset with floaters and diminution of vision. Causes include sarcoidosis, syphilis, toxoplasmosis and toxocariasis. Posterior uveitis includes choroiditis, chorioretinitis, retinochoroiditis and neuroretinitis.

Patients present with diminution of vision, floaters, metamorphosia, micropsia or macropsia, photopsia and positive scotomata. Complications include complicated cataract, glaucoma, retinal detachment and choroidal neovascularization. Choroiditis can be disseminated, diffuse, multifocal, central or juxtapapillary. Infectious cases predominate in India and tuberculosis, herpetic anterior uveitis and toxoplasmosis are the most common etiologies seen.

Studies from different parts of India reported the different prevalent patterns of uveitis. This study was conducted to

know the etiology and pattern of uveitis in tertiary care centre of Jammu region.

Material and Methods

A cross sectional study was done on 120 patients in the Department of Ophthalmology in tertiary care centre in Jammu from November 2018 to October 2019. Patients from age group 5-80 years were included irrespective of duration of disease and whether they took the treatment or not. Patients who had postoperative uveitis and post traumatic uveitis were excluded. A detailed clinical history, general physical and ophthalmological examination along with laboratory investigations were done. Patients were classified on anatomical basis according to Standardization of Uveitis Nomenclature classification. Uveitis was classified as acute (<3 months), chronic (>3 months) or recurrent depending on course of illness. On the basis of etiology, we classified them as idiopathic, autoimmune, infectious. In cases of granulomatous uveitis, koepe nodules and bussaca nodules were present.

Laboratory investigations carried out were complete blood counts, erythrocyte Sedimentation rate, montoux test, urine and stool examination, HLA typing,

VDRL. Radiological investigations performed were xray chest and sacroiliac joint. B scan, Flourscein angiography and OCT were done when indicated. All the patients were given topical cycloplegics (atropine or homatropine) and topical steroids (predinsolone). Systemic steroids were given in severe cases, cystoid macular edema and in cases of intermediate and posterior uveitis.

Results and Observations

In this study, 120 patients diagnosed with uveitis from November 2018 to October 2019 were taken. Male to female ratio was 1.26:1. Males (55.83%) were predominantly affected as compared to females (44.16%). Mean age of presentation was 39.42±11.95. 102 (85%) of the patients had unilateral involvement and 18 (15%) patients had bilateral involvement. Maximum number of cases were of anterior uveitis (62.5%) followed by posterior (20.83%), panuveitis (10%) and intermediate (6.66%) uveitis. Out of 120 patients with uveitis, 73 (60.83%) were idiopathic and 47 (39.16%) were with specific etiologies. Patients of anterior uveitis had maximum non-infectious etiology (71.42%) and posterior uveitis had maximum infectious etiology (87.5%). 72% cases of anterior uveitis were idiopathic and 16% cases were HLAB27 associated.

Psoriasis, tuberculosis and herpetic uveitis constitute 4%, 5.33% and 2.66% of total cases of anterior uveitis. Among posterior uveitis cases (20.83%), specific diagnosis was made in 16 cases (64%) of which tuberculosis was seen in 6 cases (24%), toxoplasmosis in 8 cases (32%) and serpinginous choroidopathy in 2 cases (8%).

Intermediate uveitis was seen in 8 cases (6.66%) and specific diagnosis was made in 2 cases (25%) of which tuberculosis was seen in 1 case (12.5%) and sarcoidosis in 1 patient (12.5%). In cases of panuveitis (7.8%), specific diagnosis was made in 6 cases (85.71%). Tuberculosis was the most common cause seen in 3 cases (42.8%) followed by Behcet syndrome in 2 cases (28.57%) and sarcoidosis in 1 case.

Discussion

In our study, 120 cases of uveitis attended the eye opd during the study period. Males were more predominant (67 cases, 55.8%) in comparison to females (53 cases, 44.16%). This pattern corresponds with the studies of Dogra, Das D, Supriya. Mean age of presentation in our study was 31-40 years. This corresponds to the studies of Kurumkatil, Supriya, Rathinam. Anterior uveitis was the most common anatomical type seen in our study (62.5%) followed by posterior uveitis (20.83%), panuveitis (10%) and intermediate uveitis (6.66%). Studies conducted by Das D, Singh R, Kurumkatil and Rodriguez found anterior uveitis as the most common anatomical type. Most of the cases of anterior uveitis were idiopathic (72%), specific diagnosis were made in 28% cases out of these leading cases were HLAB27 associated uveitis (16%) followed by ocular tuberculosis in 5.33% of cases. This result is similar to study conducted by Singh R, Supriya I, Biswas J. In our study, idiopathic posterior uveitis cases were the most common followed by toxoplasmosis (32%) and tuberculosis (6%).

This corresponds with the study conducted by Supriya I, Palsule AC and Biswas J. The least common type was intermediate uveitis (8 cases, 0.04%). Specific diagnosis were made in 2 cases. This corresponds with the study conducted by Supriya I, Palsule, Biswas J.

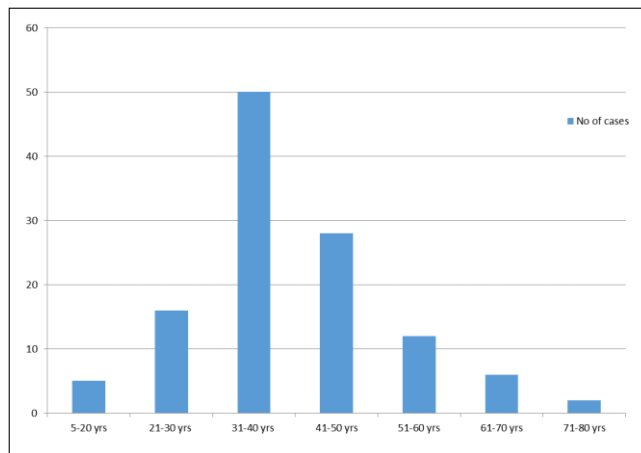


Fig 1: Age wise distribution of sample.

Table 1: Showing Anatomical Distribution of Types Of Uveitis (According To Sun Classification)

Type of uveitis	Number (n)	%age
Anterior	75	62.5%
Posterior	25	20.83%
Intermediate	8	6.66%
Panuveitis	12	10%

Table 2: Anatomical classification of infectious and non-infectious cases in patients with definite diagnoses (n=100) (percentage of total patients)

	Noninfectious(n=22) N (%)	Infectious (25) n (%)
Anterior uveitis (21)	15(71.42%)	6(28.57%)
Intermediate uveitis(2)	1(50%)	1(50%)
Posterior uveitis(16)	2(12.5%)	14(87.5%)
Panuveitis(8)	4(50%)	4(50%)

Table 3: Infectious and non-infectious etiologies in the patients with a definite diagnosis (percentage of total patients)

Noninfectious (n=22)	Infectious (n=25)
HLAB27 associated (n=12; 54.54%)	Tuberculosis (n=15; 60%)
VKH (n=1; 4.54%)	Toxoplasmosis (n=8; 32%)
Sarcoidosis(n=2;9.09%)	Herpes (n=2; 8%)
Serpinginouschoroidopathy(n=2;9.09%)	
Behcet (n=2, 9.09%)	
Psoriasis (n=3; 13.63%)	
Total =22	

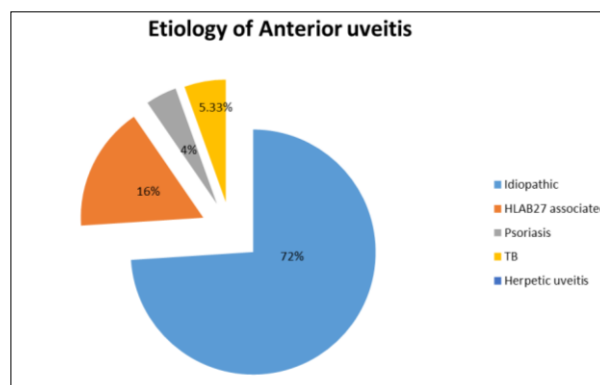


Fig 2

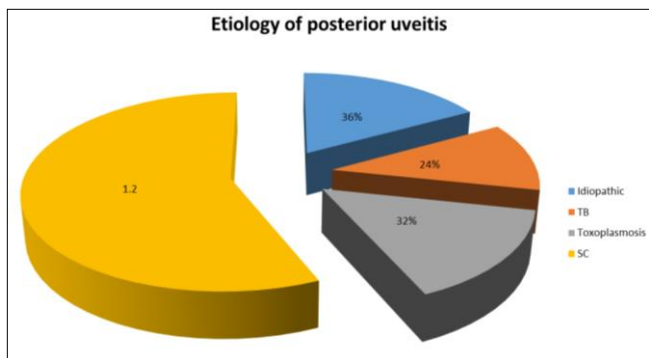


Fig 3

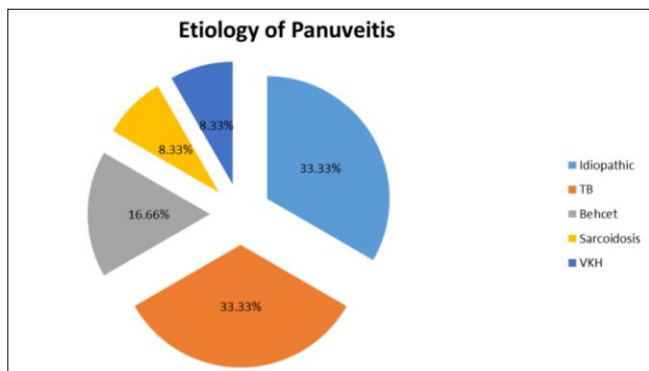


Fig 4

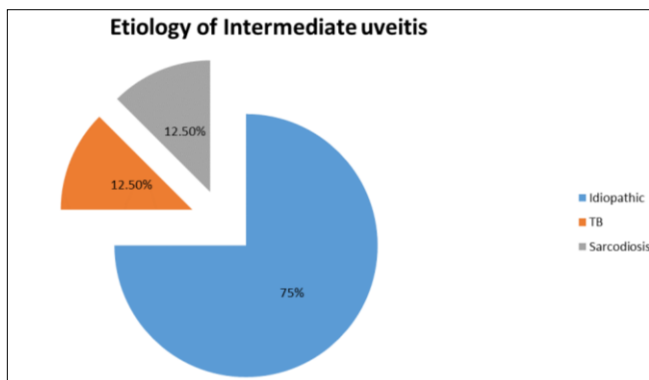


Fig 5

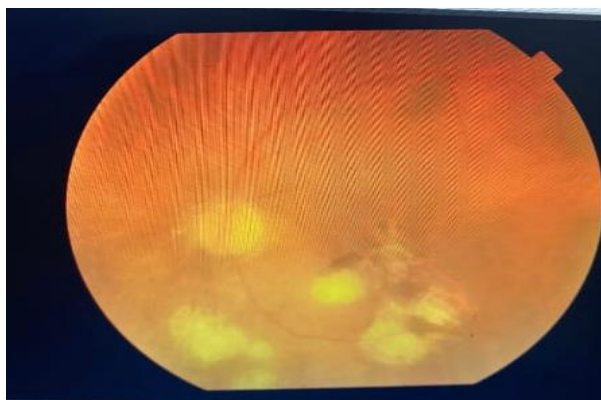


Fig 6: Fundus photograph showing healed choroiditis patches of toxoplasmosis.

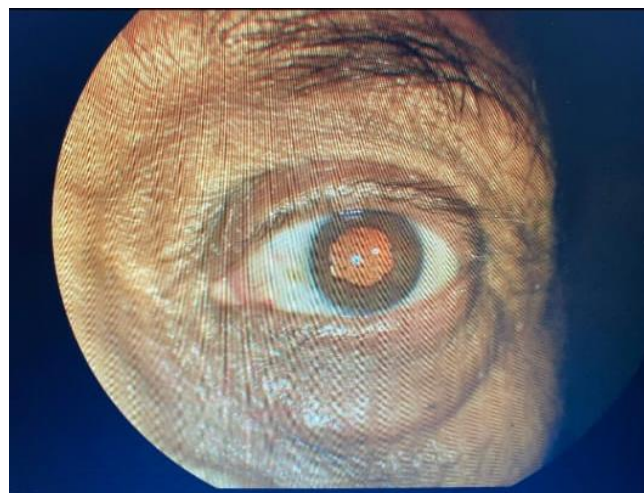


Fig 7: showing festooned pupil due to posterior synechiae on slit lamp examination. Sources of Support: Nil, Conflict of Interest: None declared.

Conclusion

In our study prevalence of the uveitis was 0.64%. Anterior uveitis was the common anatomical type followed by posterior uveitis, panuveitis and intermediate uveitis. Majority of the cases were idiopathic. Majority of the patients having infectious etiology had tuberculosis followed by toxoplasmosis and herpes associated uveitis. HLA B27 anterior uveitis was the most common known etiology of anterior uveitis and toxoplasmosis was the most common specific etiology of posterior uveitis. Uveitis is a vision threatening ocular problem and with proper diagnosis and Treatment we can prevent irreversible ocular damage.

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