

A clinical study of aetiology in anterior uveitis & prevention of visual impairment in anterior uveitis

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Aims and objectives:

- To study the aetiology of anterior uveitis.
- To study its clinical course and management of cases of anterior uveitis.
- To prevent the visual impairment in cases of anterior uveitis.

Inclusion Criteria:

- Included patients with symptoms like Pain, Redness, Photophobia, Diminished vision, Watering.
- Included patients with signs of uveitis like lid edema, circum corneal congestion, Keratic precipitates, aqueous cells and flare, hypopyon, miosis, festooned pupil etc.

Exclusion Criteria:

- Blind eye with uveitis
- Phthisis bulbi with uveitis
- Uveitis associated with Malignant diseases
- Terminal cases
- uveitis with secondary glaucoma
- Age <2yrs and >80yrs.
- Isolated cases of posterior uveitis and intermediate uveitis.
- Old cases of chorioretinitis.

Period of study :

- From January 2013 to January 2015

I. Materials and Methods:

- All the cases of RED EYE are screened for symptoms and signs of anterior uveitis.
- The present clinical study of Anterior uveitis is made on cases of uveitis attending the Department of Ophthalmology, Govt. General hospital Guntur during 2013-2015.
- A detailed history both general and ocular is taken in every case.
- History is elicited regarding exposure to pets.
- Dietary habits of eating undercooked meat.
- Sexual history, Drug history regarding usage of immune suppressive agents like steroids.
- H/O arthritis, genito-urinary diseases, gastro-intestinal diseases detailed history of ocular disease has been elicited in every case regarding onset and symptomatology of the disease.
- Detailed family history regarding diseases like T.B, leprosy.
- Detailed clinical examination of the eye is made in every case by assessing visual acuity and slit lamp examination, indirect and direct ophthalmoscopy, Gonioscopy and B-scan wherever necessary.
- A detailed laboratory evaluation is made in every case including Urine examination
- Radiological investigations-X-ray chest and X-ray sacro iliac joints HLA typing, are done wherever necessary.

II. Discussion:

- Uveitis is a treatable cause of blindness and constitutes 50%-92% of treatable blindness (according to Indian journal of Ophthalmology 2013)

Classification:

- Based on onset of symptoms it is classified into

- 1.Acute
- 2.Chronic

Anatomical classification

- Anterior
- Intermediate
- Posterior
- Panuveitis

Pathological classification

- Granulomatous
- Non-granulomatous

Etiological classification: (INTERNATIONAL UVEITIS STUDY GROUP CLASSIFICATION, IUSG 2000.)

1. Idiopathic

2. Secondary to systemic diseases

- a) Sero negative Arthritis - Ankylosing spondylitis - Reiter's Syndrome- Psoriatic Arthritis- Behcets' diseases- Juvenile Rheumatoid Arthritis.
- b)gastrointestinal- Ulcerative colitis, Crohn's diseases, Whipple's diseases.
- c)respiratory diseases– Sarcoidosis, tuberculosis.
- d) venereal diseases– Syphilis and gonorrhoea.

3. INFECTIOUS UVEITIS :

- a) Viral,
- b)Fungal,
- C)Bacterial,
- d)Parasitic.

4) Traumatic - Surgical -Non-Surgical

5) Toxic Uveitis - Chemical Drug induced

6) Masquerade Syndrome - Retinoblastoma, Leukaemia, Intraocular foreign body, Malignant Melanoma.

7) Immunological Uveitis

- a) Lens induced – Phacotoxic uveitis, PhacoAnaphylactic Uveitis
- b) Sympathetic Ophthalmia

8) Others :

- a) Associated with Anaphylactic and allergic reaction
- b) Associated with septic conditions like dental infections, tonsillitis, otitis media etc.

Clinical manifestations:

Symptoms of Anterior Uveitis : Pain, Redness, Photophobia, Diminished vision, Watering

Signs- lid edema, circum corneal congestion

Keratic precipitates, aqueous cells and flare, hypopyon, miosis, festooned pupil etc.

Treatment:

- After treatment on topical steroids like prednisolone 1%, dexamethasone 0.1% and on topical mydriatic and cycloplegics like atropine 1%, homatropine 2% for 4 weeks and followed with tapering the dose of steroids for 6 weeks and follow up for more than 6 weeks period in 80% of cases vision improved satisfactorily.
- Systemic steroids like prednisolone are given for patients presenting with chronic uveitis.
- In 9% of the cases vision could not improve further due to various sequelae of uveitis, and in 5% of cases the results are unknown due to lack of followup.

OUTCOME	NO. OF CASES	PERCENTAGE
Vision improvement	86	86%
No improvement	9	9%
Pts not under follow up	5	5%

- In 70% of the patients, etiology is idiopathic.
- Next common etiological factor being infectious etiology
- Most of the patients responded to topical steroids and mydriatic-cycloplegic drugs.
- Most of patients attained visual acuity of 6/6 with the above medication and after follow up for 6 months.

III. Conclusion:

Anterior uveitis is one of the causes of avoidable blindness. Early diagnosis is possible with thorough history taking and various investigations. This study of 100 cases in the span of two years concluded that early diagnosis and treatment is important to avoid blindness caused by anterior uveitis

References:

- [1]. American academy of ophthalmology 2012-2013 Fundamentals and principles of ophthalmology- pg no. 90-130.
- [2]. Albert and Jakobiec volume 2, 2nd edition, pg no. 1180-1215.