

**A CASE REPORT OF GRANULOMATOUS UVEITIS WITH
SECONDARY COMPLICATIONS****Dawn V. J.^{*1}, Rosmi Jose², Anchu C.³, Arya Jayakumar⁴ and Archana P.⁵**^{1,3,4,5}M. Pharm, ²Pharm D., ^{1,3,4,5}Assistant Professor and ²Lecturer^{1,2,3,4,5}Department of Pharmacy Practice, Nehru College of Pharmacy, Pampady Thrissur-
680588.²JKKNattraja College of Pharmacy, Komarapalayam, Tamilnadu, 638183.Article Received on
06 April 2021,Revised on 27 April 2021,
Accepted on 17 May 2021

DOI: 10.20959/wjpr20216-20580

Corresponding Author*Dawn V. J.**M. Pharm, Department of
Pharmacy Practice, Nehru
College of Pharmacy,
Pampady Thrissur-680588.**ABSTRACT**

Uveitis is a common condition characterized by the inflammation of uveal tissue, while granulomatous uveitis is a relatively rare condition in which the patient presents with chronic inflammation of proliferative nature in response to various etiological factors such as irritant foreign bodies, inorganic or organic material introduced from outside, intraocular hemorrhage or necrotic tissue within the eye, or one of the certain organisms of non-pyrogenic and relatively non-virulent character. Granulomatous uveitis is also reported in sarcoidosis. In the current case, the patient presents with chronic uveitis and develops severe secondary complications viz. Angle-closure Glaucoma and Diabetes mellitus. There is a difficulty with the

actual etiology of the condition. There is no familial history of similar diseases, no cases of lime disease or other autoimmune disorders, no exposure to Tuberculosis, and no other history of systemic illness nor other possible etiology of the same. The patient's ACE levels are elevated indicating the possibility of sarcoidosis but yet to be confirmed by the physician. The case represents a rare condition and its complications.

KEYWORDS: Granulomatous uveitis, Anterior uveitis, Posterior synechiae, cataract, neovascularisation.

INTRODUCTION

Inflammation is a protective mechanism by which the body retaliates against harmful stimuli. In uncontrolled inflammatory response the body or affected organ experiences severe damage

which in turn produces clinically significant symptoms and states. Granulomatous uveitis is a chronic inflammatory condition that pertains to the ocular system. The condition can instigate in the patient several other difficulties such as glaucoma and type 2 diabetes. The common ocular signs of granulomatous uveitis are mutton fat precipitates, neovascularization of iris, hemorrhagic lens, and posterior synechiae, and so on. The management of chronic inflammation is through the use of anti-inflammatory agents viz. steroids. The symptomatic treatment regimen can include an analgesic, a mydriatic agent. Continuous and prolonged inflammation may trigger a secondary complication of the ocular system such as cataracts and corneal opacity.

EXAMINATIONS

Ocular Findings: both eyes had hemorrhagic iris, 360° posterior synechiae, neovascularization of iris, multiple mutton fat keratic precipitates, no retinal detachment, and no PV detachment.

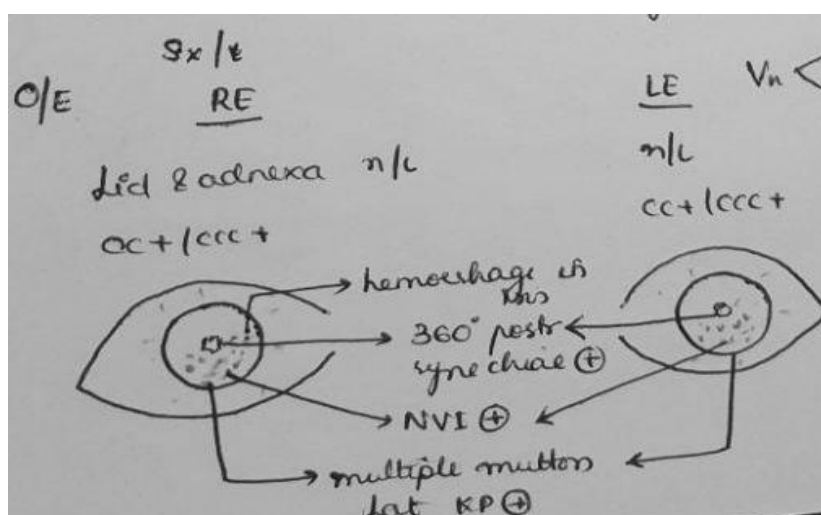


Figure 1: Ocular Diagnosis before treatment.

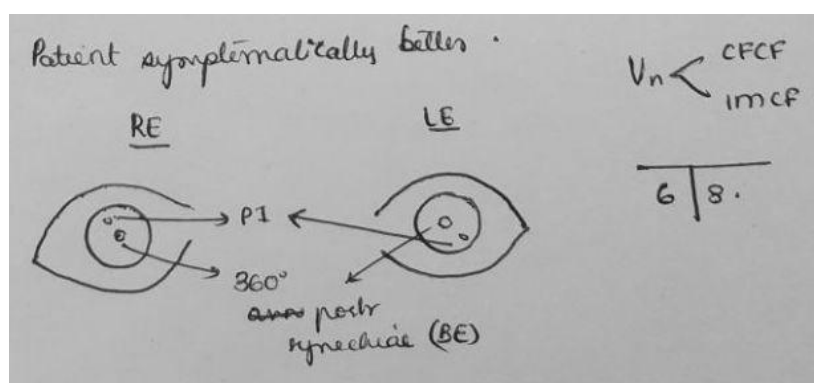


Figure 2: Ocular Diagnosis at discharge.

Blood Analysis: Elevated ESR, Unconjugated Bilirubin, PCV, ACE, serum calcium, sodium, potassium, and serum glucose. HRCT investigation of the thorax showed paraaortic and perivascular lymph nodes.

DISCUSSION

Granulomatous Uveitis is the inflammation of the uveal tissue with the characteristic feature of posterior synechiae, neovascularization of iris, and multiple mutton fat keratic precipitates. The National Institutes of Health diagnostic guidelines suggest the presence of the above symptoms as the diagnosis, granulomatous uveitis. The elevated ACE points to undiagnosed sarcoidosis, elevated glucose indicates diabetes mellitus. Ocular investigation revealed angle-closure glaucoma. The pharmacological intervention consisted of subconjunctival administration of a combination of 6 mg procaine hydrochloride, 1 mg atropine sulfate, and 0.12 ml epinephrine solution for reducing severe ophthalmalgia, 6 doses I.V methylprednisolone 30 mg/kg as an anti-inflammatory, performed Laser Peripheral Iridotomy treatment in both eyes on consecutive days, on Insulin for type-2 diabetes.

PHARMACIST COMMENT

The choice of treatment and procedures prescribed to the patient was found to be rational and the prognosis was found to be good. The treatment was symptomatic for granulomatous uveitis, with discharge medications including 50mg once daily for 7 days followed by 40 mg once daily 7 days, and oculum guttae(O.g) Difluprednate (0.05% w/v) una stilla (U.s) sex temporum (S.t) and atropine eye ointment Ter Di Sumendus (t.d.s). The secondary diabetes was controlled using a combination of insulin 20-0-14 IU and oral hypoglycaemic agent metformin 500 mg Post-Cibose (P.c). Review requested after 14 days. The patient's condition improved and the prescription modified with reduction of oculum guttae(O.g) Difluprednate (0.05% w/v) Quater stilla (Q.s) and atropine eye ointment Ter Di Sumendus (t.d.s), The patient was advised to undergo cataract surgery.

REFERENCES

1. Andrew A Dahl, MD, FACS, Granulomatous Iritis (Anterior Uveitis)[internet]. Medscape; 2016 [cited: 2018 Mar 02]. Available from <https://emedicine.medscape.com/article/1209505-overview>
2. Rupesh V Agrawal, Somasheila Murthy, Virender Sangwan, and Jyotirmay Biswas, Current approach in diagnosis and management of anterior uveitis. Indian J Ophthalmol, Jan-Feb, 2010; 58(1): 11–19.

3. Babu BM, Rathinam SR, Intermediate uveitis[internet]international journal of ophthalmology;2010[cited: 2018 Mar 02]. Available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2841369/>
4. Gupta V, Gupta A, Ancillary investigations in uveitis. Indian J Ophthalmol, Jun, 2013; 61(6): 263-8. DOI: 10.4103/0301-4738.114093.
5. Merayo-Loves J. Power W.J. Rodriguez A. Pedroza-Seres M. Foster C.S, Secondary Glaucoma in Patients with Uveitis. Ophthalmologica, 1999; 213: 300–304.
6. R.A. mana S. Moorthy, MD. A.N. dré Mermoud, MD, George Baerveldt, MD, Don S. Minckler, MD, Paul P. Lee, MD, N.A. rsing A. Rao, Glaucoma associated with uveitis. Survey of ophthalmology. March–April, 1997; 41(5): 361–394.