



SECONDARY OPEN ANGLE GLAUCOMAS IN VARIOUS SYSTEMIC DISEASES IN TERTIARY EYE CARE CENTRE...A CROSS SECTIONAL STUDY

**Dr K. K Siva
Subbaraom. S**

Asst. Professor, Govt. medical college., Rajamahendravaram.

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INTRODUCTION

GLAUCOMA IS NOT A disease but group of disorders in which there is abnormally increase in intraocular pressure causing damage to optic disc leading to optic neuropathy field defects, scotomas, tubular vision finally total loss of vision. Not only congenital causes Diabetes and essential hypertension other SYSTEMIC DISEASES also causes glaucoma. we conducted a survey on 84 patients with raised intraocular pressure.

To prevent eye damage we continuously monitor the eye pressure changes.

AIM OF STUDY

to know the various SYSTEMIC diseases affect IOP of eye..normally IOP is influenced by even age, sex, diurnal variation, posture so we conducted a survey on 108 patients suffering with different diseases type of disease influence the intraocular pressure we came to know even ANEMIA affects the iop

PATHOPHYSIOLOGY OF GLAUCOMA glaucoma is nothing but raised intraocular pressure..it may due to so many factors like excess secretion of aqueous fluid or blockage of drainage of aqueous circulation. normal aqueous production is 2.3 microlitre per minute

In generalised oedema like anasarka has GLAUCOMA due to over production of aqueous Humour and in argemone mexicana poisoning. the following are general causes of glaucoma

OBSIDITY
HYERTENSION

HYPERTHYROIDISM

RHEUMATID ARTHRITIS

CHRONIC USE OF DRUGS

CHRONIC USE OF STEROIDS

COLLAGEN DISORDERS

Sometimes RHEUMATID ARTHRITIS may cause local inflammation of episcleritis leads to glaucoma. pregnancy itself can't cause glaucoma. but in drug users raised IOP can be seen

In 20 cases of dialysis we observed glaucoma it may be due to haemolytic glaucoma various types of scleritis causes glaucoma raised IOP more than 50. MmHg

In scleritis choroid tissue also inflamed

Leads to iridocyclitis and close of angle of anterior chamber.

Inflammation of cornea ..viral infection. fevers may lead to glaucoma. systemic diseases like in nephritis. vasculitis.

erythema nodosum, leprosy reaction, sarcoidosis. optic neuritis where plenty of corticosteroids are using leads to open angle glaucoma.

ANEMIA, POST RADIATION. causes open angle glaucoma..we observed in 10 percent of cases malignancy with chemotherapy have open angle glaucoma.

In occupational disorders like cement workers and painters have open

angle GLAUCOMA.,,

MATERIALS AND METHODS

we take total 108 patients for study..a cross sectional study was conducted 46 percent of patients were with prospective study we observed 86 percent positiveness.

Retrospective study also done 12 percent is true positive.

Scleritis cases...42

Scleritis with RHEUMATID ARTHRITIS..24

DRUGS using cases...24

THYROID CASES..5

Other cases...5

OBJECTIVE OF STUDY.

BY THIS study we can minimise unnecessary drug usage. early intervention in process of glaucoma

INVESTIGATION. Measurement of IOP by SCHIOTZ TONOMETRY

APPLANATION TONOMETRY

AIRPUFF TONOMETRY

TONOPEN

GONIOSCOPY

FUNDOSCOPY

All cases under went all types of tonometry..IOP more than 40 mmHg in 45 cases

IOP > 30 mmHg cases in 40 cases

IOP > 21 mmHg cases in 23 cases

SYMPTOMS AND SIGNS

Lacrimation in 90 cases

Pain in 80 cases

Vision difficulty in 80 cases

Scotomas and field defects in 70 cases

Corneal oedema in 46 cases

Coloured halos in 23 cases

Vanhericks method grade 1 open angle

FUNDOSCOPY cup disc ratio more than 3:1 ratio ..temporal pallor is seen in 46 percent of cases all cases have vision difficulty..in systemic diseases 97 percent of cases unilateral after 5 years of time bilaterality is seen In drugs usage cases not only glaucoma macula degeneration is seen

OBSERVATION.

we noticed that every long duration disease is affects IOP and cause secondary open angle glaucoma.

Beta blockers like propranolol. and betaxolol. is used. in resistant cases dorzolamide is given. only 78 percent of cases are responded. Un responded cases have bad prognosis.

DISCUSSION

Any disease or drug affects IOP of eye so be care ful about drugs and disease process.raised IOP causes vision difficulty

Remove the primary cause of glaucoma IOP automatically subsided..most commonly steroids increase IOP antidiabetic drugs and anti hypertensive drugs cause IOP instability.

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