

# STUDY OF RISK FACTORS IN RETINAL VENOUS OCCLUSION

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- FINANCIAL DISCLOSURE
- NO CONFLICT OF INTEREST



# INTRODUCTION:

- Retinal vein occlusions is the 2nd most common retinal vascular disease after Diabetic retinopathy.

classification:

Site of occlusion:1.CRVO

2.HRVO

3.BRVO

Capillary pefusion: Ischemic

non ischemic



# AIM AND OBJECTIVES:

- To study the demographic profile of patients with retinal vein occlusions
- To determine the risk factors in retinal vein occlusions



# MATERIALS AND METHODS:

- This is a hospital based observational study conducted on 50 patients attended to retina clinic, GREH, Visakhapatnam.
- INCLUSION CRITERIA:
- Patients attended to the retina clinic who were diagnosed to have retinal vein occlusions
- EXCLUSION CRITERIA:
- Hazy media due to corneal opacity, dense cataract, artery occlusions, VH, CSR, CME, RD, AION



# METHODOLOGY:

- A detailed history -chief complaints, past history
- Visual acuity
- Slit lamp examination
- Fundus examination
- IOP with Goldmann Applanation Tonometry
- Gonioscopy



- Systemic evaluation includes:
    - SBP of >140mmHg, DBP of >90
    - FBS>110 mg/dl
    - Lipid profile
    - Complete hemogram
- Cardiac evaluation-2D echo

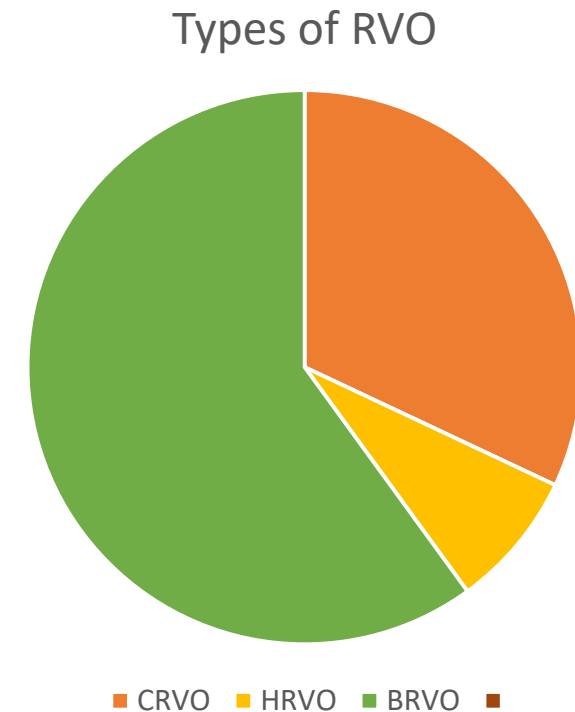


# RESULTS :

- The present study conducted at GREH includes 50 patients with retinal vein occlusions, Out of which 16(32%) were CRVO, 4(8%) were HRVO and 30(60%) were BRVO.

Types of RVO

Type of RVO	Number	%
CRVO	16	32%
HRVO	4	8%
BRVO	30	60%
Total	50	100%



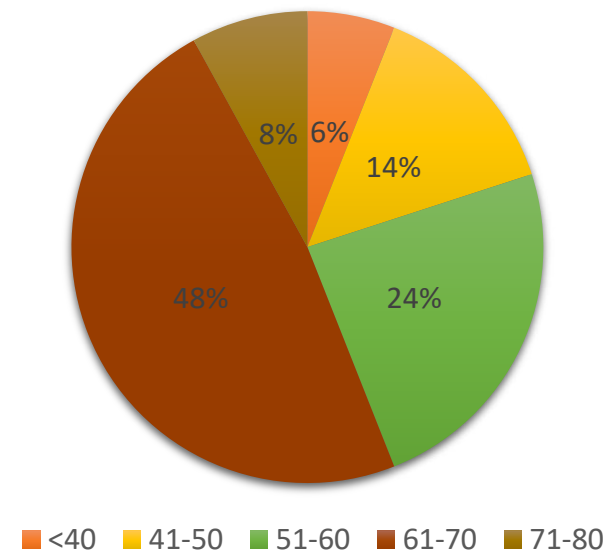


- Age distribution:

Majority were in the age group of 61-70 yrs i.e.,48% and least number are <40 yrs age i.e.,6%

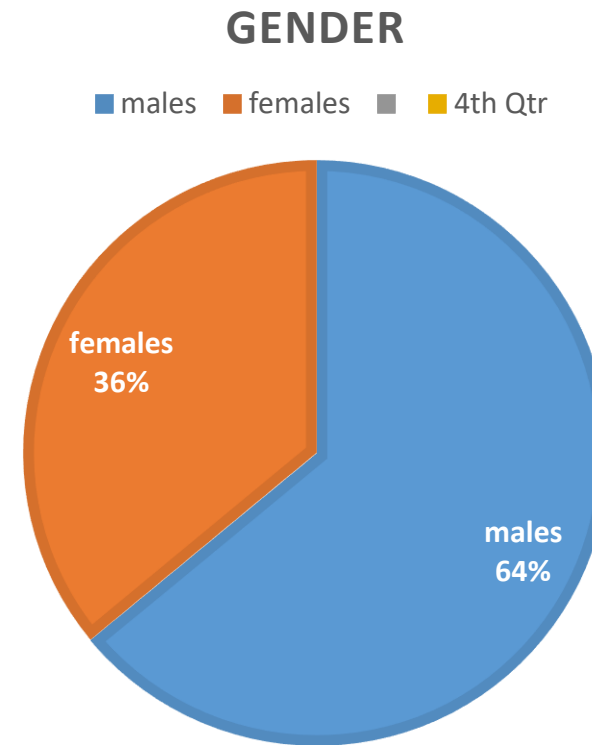
Age	Number	%
<40	3	6%
41-50	7	14%
51-60	12	24%
61-70	24	48%
71-80	4	8%
Total	50	100%

Age Distribution



- Gender Distribution: Out of 50, 30% were males and 18% are females

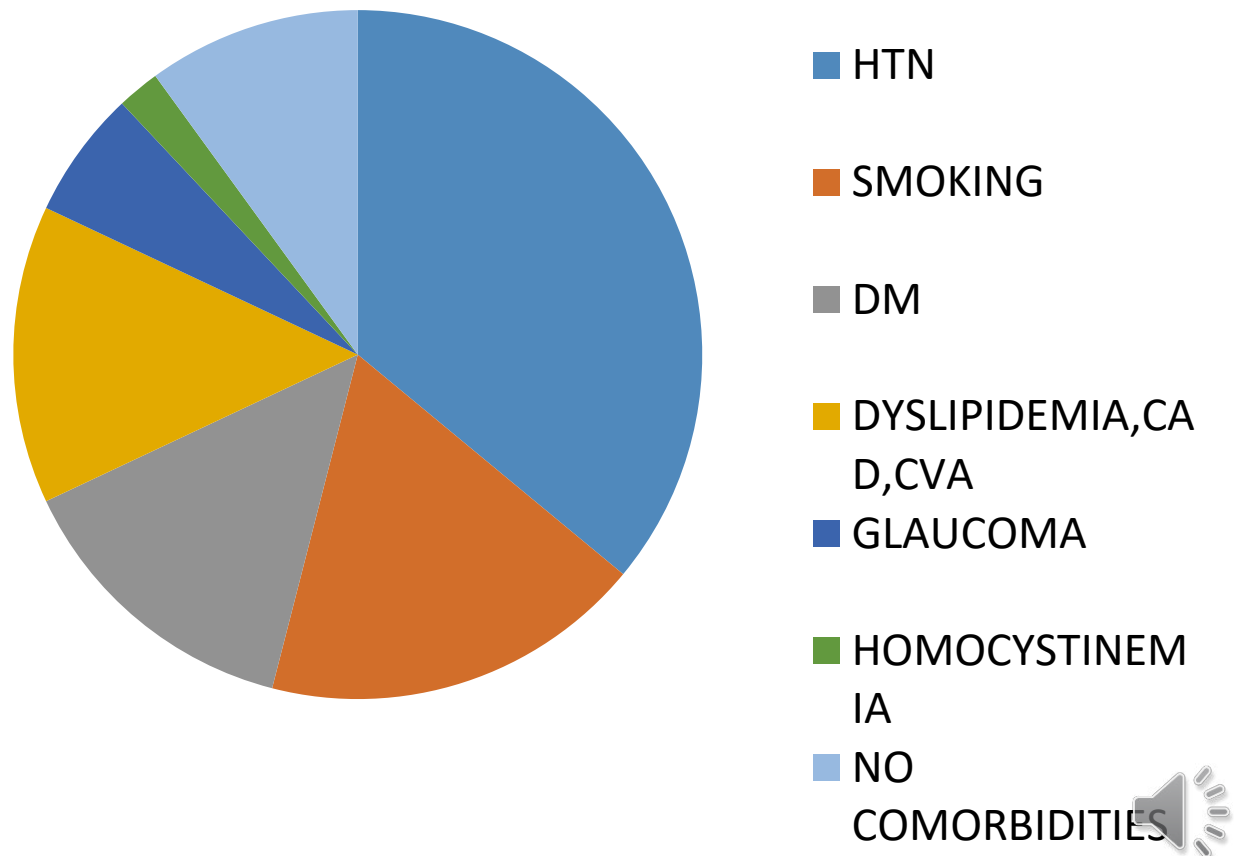
Gender	Number	%
Males	32	64%
Females	18	36%



- Risk Factors:
- Out of 50,22% had both DM and HTN

Risk factors	number	%
HTN	18	36
Smoking	9	18
DM	7	14
Dyslipidemia, CAD, CVA	7	14
Glaucoma	3	6
Homocystinemia	1	2
No Comorbidities	5	10

**RISK FACTORS**



# DISCUSSION:

MY STUDY	COMPARATIVE STUDY
BRVO-60%,HRVO-8%,CRVO-32%	Blue Australian study by Mitchell et al-BRVO-69.5% HRVO-5.1%,CRVO-25%

\*According to Hayreh BRVO are 3 times more common than CRVO

\*Majority are seen in 61-70 yrs

Male preponderance- 64%,Females-36%	Shabaan A Mehany study shows males- 66.66%,females-33.33%

\*High hematocrit in males act as contributory factor



Dyslipidemia,CVA,CAD – 14%	Dodson et al reported hyperlipidemia-34%
Glaucoma-6%	Hirota et al study-12% developed RVO

\*Raised homocysteine levels seen in found in 2%.

\*Smoking is seen in 18%

\*No comorbidities seen in 10%

\*Old age is an independent risk factor



# CONCLUSIONS:

- The present study conducted at REH,Visakhapatnam to conclude :
  - The incidence of RVO is more in the age group of 61-70yrs(48%)
  - study shows male preponderance(64%)and females(36%)
  - Incidence of CRVO 32%,HRVO 8%,BRVO 60%
  - Greater risk factor association is with HTN,Smoking,DM.
  - Age is an independent risk factor.



# REFERENCES:

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