CLINICAL SPECTRUM AND COMPLICATIONS OF POLYCYTHEMIAIN A TERTIARY CARE CENTRE

BY DR. BHARGAV VUPPUMALLA



Dissertation Submitted to the
Shri Dharmasthala Manjunatheshwara University, Dharwad, Karnataka,
In partial fulfillment
of the requirements for the award of degree of

DOCTOR OF MEDICINE

IN

GENERAL MEDICINE

Under the Guidance of
Dr. SHILPA HAKKI
PROFESSOR
DEPARTMENT OF GENERAL MEDICINE

Co - Guide
Dr. DEEPAK GONI
ASSISTANT PROFESSOR
DEPARTMENT OF HEMATOLOGY



DEPARTMENT OF GENERAL MEDICINE
SDM COLLEGE OF MEDICAL SCIENCES AND HOSPITAL,
DHARWAD
2020-2023

ABSTRACT

AIMS AND OBJECTIVE: -

Polycythemia also known as erythrocytosis is defined as an apparent or real increase in hemoglobin or red blood cells over the level which is considered harmful for that age or gender. This results in increased thickness of blood making it difficult to travel through the blood vessels and organs. The symptom of polycythemia includes headaches, blurry vision, increased blood pressure, red skin, dizziness and confusion, abdominal discomfort, itchy skin, gout, bleeding problems, etc. Literature related to polycythemia and its complications is very limited among south Indian population especially in Dharwad Hubli region. Therefore our study will provide a

wider outlook about the disease spectrum helping in increasing the rate of diagnosis.

TYPE OF STUDY: -

A hospital based cross- sectional analytical study was conducted among OPD patients and patients admitted in wards of SDM College of Medical Sciences and Hospital, Sattur, Dharwad

MATERIALS AND METHODS: -

. Patients with hemoglobin> 16.5 mg/dl in men; hemoglobin> 16 mg/dl in women was considered for the study. However spurious polycythemia patients were excluded. The study was conducted over a period of 2 years. Total sample size calculated was 60 .A designed semi-structured proforma containing socio-demographic data, clinical features, past medical history, personal history, etc. was used.

RESULTS: -

Of the total participants as per complications Ten patients showed CVA being the most common complication associated, five showed dizziness, four each showed paraesthesia and CVT, three showed erythromelalgias, two each showed TIA and PTE. The most common symptomatology were neuro deficits among 14 patients, followed by cough and abdominal pain among eight patients each. The other symptoms observed were fever, breathlessness, giddiness, pruritis, etc.

Of total study participants, 15% (n=9) had primary polycythemia whereas 85% (n=5 l) had secondary polycythemia. 13 patients were smoker, eight had COPD, five had renal cysts, and one each had hyperuricemia, adrenal icidentaloma (pheochromocytoma),

TOF, OSA and rest cause still under evaluation however study causality wasn't our aim of the study.

CONCLUSION: -

This study has provided a better understanding of the differences in symptamology the clinical pattern of presentation, the notorious nature of the disease to present mostly with no clinical signs, clinical findings, variation in hematological parameters, radiological findings and evaluation of the occurring complications. The study enumerates a series of reference ranges that vary about a widely based on ethnicity and population region. The disease burden per se on the patient where in a deeper evaluation revealed dreadful underlying disease causality, the patients polycythemia was a soft indicator of the dreadful multiple diseases with other etiologies even in a secondary polycythemia patient, whose early diagnosis can give the patient a treatment benefit decrease mortality and disease burden on the society and Patients with thrombosis, erythrocytosis, thrombocytosis and hemorrhage should be suspected to have myeloproliferative disorders like polycythemia vera and investigated. JAK2 mutation analysis should be a part of initial evaluation of patients.