

To analyze various changes in the red blood cell (RBC) parameters in patients with chronic kidney disease (CKD) and to correlate it with the stage of the disease a study from Tertiary care hospital Of Delhi NCR

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Abstract:

Aim:

Anemia is a common sequelae of chronic kidney disease (CKD), associated with significant morbidity. The study was conducted to know hematological manifestations in patients of Chronic Kidney Disease admitted to Dept of Nephrology and organ transplantation, Sharda superspecialty hospital, Delhi NCR

Material & Methods:

Renal diseases are associated with a variety of hematological changes, and anemia is the most predominant feature. 55 patients with Chronic Kidney Disease admitted in Nephrology Unit were studied. All patients were subjected to all routine investigations including Complete Blood Count, Blood Sugar, RFT & electrolytes and other relevant tests.

Results:

- Mean Age of the patients was 49.5 ± 8.5 years.
- 69.3% patients were males and 30.7% patients were females.
- As per the WHO criteria for anemia grading, following are the anemia with severity grading in CKD patients
- Stage wise distribution of patients in stage I, II, IIIa, IIIb, IV, and V was nil, 3.6%, 3.6%, 1.8%, 9.09% & 81.1% respectively
- CKD stage from stage 2 to 3b, patients had mild anemia and from CKD stage 4 to 5 patients have moderate to life threatening anemia (as per WHO grading).
- Among patients with Hemoglobin > 11 gm/dl, 3.6% were diabetic and 7.2% were non diabetic.
- Normocytic, normochromic anemia was the most common abnormality and was found in 65% of patients having Hemoglobin < 10 gm/dl.
- Microcytic Hypochromic anemia was found in 30% of patients and rest patients had normocytic, hypochromic anemia.

Conclusion:

- Hemoglobin level drops with increasing stages of CKD.

- Higher proportion of diabetic patients was found in the group having hemoglobin less than 11 gm/dl.
- Maximum number of patients was in mild grading of anemia in our study.
- Most of the patients having moderate to severe anemia were in CKD stage 5 as per our study.
- Normocytic, Normochromic Anemia was the most common peripheral smear finding among Chronic Kidney Disease patients.



Biography:

Professor Dr. Punit Gupta is MBBS, MD (Medicine), DM (Nephrology) and PhD. He is the Honorary Nephrologist to the Governor of Chhattisgarh State since 2009. He is Chairman and Member of many important academic and management committees of various Government Medical Institutions in the country and the Pt. Deen Dayal Upadhyay Health Sciences University, Raipur. He has guided over 100 Postgraduate & Technologist student for their thesis & Project in Nephrology & Research and also served as an examiner for the university examinations. A man of researches and publication, he has presented more than 160 research papers and abstracts on Kidney Diseases in Tribal populations at Renowned National and International Conferences. He was felicitated for being the only research scholar who had presented 29 abstracts in Indian Society of Nephrology conference, Pune and 11 research papers at Asia Pacific congress of Nephrology, 2008 in Malaysia on tribal kidney diseases. His Oral Paper was awarded first prize in ISNCON 2007, New Delhi. He was awarded internationally prestigious APCN Developmental awards in Malaysia 2008 and a Follow Scholarship by International Society of Peritoneal Dialysis in Turkey 2008. His paper was recognized as a best Paper in API 2014, Bhilai. He was awarded Certificate of



Excellence awards by the Times of India groups 2016. His work was appreciated with certificate of appreciation by Indian Dietician association 2016. He was felicitated by Agrasen Agrawal Samaj for his excellent work in Tribal Population 2016. He was honored with excellence award by 'Z' TV Chhattisgarh for this distinguishes work in kidney disease in rural population of Chhattisgarh in 2017. He has developed a concept of Tele dialysis, first of its kind in Asia. He has developed Portable dialysis Machine (MAKE-D) for 60 billion kidney patients in world who require dialysis many times in a week. He has developed an abdominal Pressure Measurement Scale, which is very useful of Continuous Ambulatory Peritoneal Dialysis Patients (type of dialysis). He has developed and economic, efficient and effective walkie talkie system for consultation and directions to the hospital staff and doctors. He has been awarded Dr. B. C. Roy National Award for his research to give Aid or Assistance to Research Project for the year 2016.

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