

A prospective study on chemotherapy induced anemia in cancer patients undergoing treatment using serial hemoglobin measurement at the National Hospital Abuja, Nigeria

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Introduction: Anemia is a common complication of myelo-suppressive chemotherapy. Severe anemia is usually treated with red blood cell transfusion, however, mild-to-moderate anemia most often are managed conservatively. There is no universally established benchmark of hemoglobin of patients selected for cancer chemotherapy to inform a global best practice and increase patients treatment outcome and quality of life.

Objective: The objective of this study is to examine the change in Hb level of cancer patients undergoing chemotherapy using serial Hb measurement.

Materials & Methods: A total of 100 voluntary patients with solid malignancies were recruited within a period of eight months. Baseline demographic characteristics and type of tumors were obtained. Pre-treatment Hb level was measured on first day of consultation and repeated every 2 weeks during the therapy until after three consecutive Hb readings.

Results & Analysis: Data collected was analyzed using SPSS version 10. Out of the 100 cancer patients, 88% were female. Breast 68% (68) was commonest site of tumour. Prevalence of anemia in the study was 72%, and majority of patients had their Hb at the end of therapy within the range of 9.60 g/dl to 10.62 g/dl. At P-value>0.05, there was no statistical significance on distribution of mean hemoglobin, standard deviation based on sex and treatment type.

Conclusion/Recommendation: Chemotherapy has no significant effect on Hb especially in patients with high baseline Hb level between 11 g/dl to 12 g/dl in our study. Prevalence of anemia in the studied patients was 72%. We recommend a benchmark of Hb of 11 g/dl minimum for any patient being selected for chemotherapy in Nigeria.

Biography

Simeon Chinedu Aruah graduated in 2004 from University of Nigeria Nsukka (UNN) where he obtained MBBS Nigeria, and enrolled for residency training in Radiation Oncology at the National Hospital Abuja, Nigeria, qualified in 2014 and got inducted as a Fellow of West African College of Surgeons (FWACS) Radiation Oncology in March 2015. He won National Hospital Abuja Research Grant 2013 during his dissertation work. He has a Master's degree in Public Health (MPH) from University of Nigeria Nsukka (UNN). He found an NGO Pathfinder Healthcare Foundation (PHF) to create cancer awareness among rural dwellers. He is currently working at the National Hospital Abuja, Nigeria as a Researcher and Consultant Radiation Oncologist with interest in Public Health.

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