

12th World Cancer Conference

September 26-28, 2016 London, UK

Anemia in cancer patients undergoing radiotherapy: Our experience at the National Hospital Abuja, Nigeria

Chinedu S Aruah¹, Oyeseun R¹, Oche Ogbe¹, Igbinoba F¹, Okwor Vitalis², Onyishi T N³, Jawa Z M¹ and Onyedika Okoye¹

¹National Hospital Abuja, Nigeria

²University of Nigeria Teaching Hospital, Nigeria

³Enugu State University of Science and Technology, Nigeria

Introduction: More than 50% of cancer patients will receive radiotherapy in the course of their therapy. Anemia is the most common hematological complication in cancer patients. The cut-off value for anemia varies from centre to centre, but Hb of 10 g/dl is a borderline value and administration of radiotherapy without adequate hematological support may tilt the patient into clinical anemia.

Objective: To study the impact of radiotherapy on the hemoglobin level of cancer patients undergoing therapy.

Materials & Methods: A total of 63 patients with solid tumors with intent for radical treatment were recruited within a period of 8 months. Informed consent of participants was obtained and demographic characteristics of the cancer patients and their various oncologic diseases were gathered. Baseline or pretreatment Hemoglobin (Hb) was measured on the first day of consultation. Patients were simulated and treated with linear accelerator. Their Hb level was measured once every 2 weeks during therapy. The blood film pictures of the patients were examined in the course of treatment. The whole process was terminated after 3 consecutive Hb reading or after week 6. Anemia was classified for this study into: Less than 10 g/dl-severe anemia; 10-10.9 g/dl -moderate anemia; 11-12 g/dl-mild anemia; >12 g/dl-no anemia (Normal).

Results & Data Analysis: Data collected was analyzed using a standard statistical package for social science (SPSS) version 10. Out of 63 cancer patients, 92.1% were female and 7.9% were male. Age range was 25–75 years, with median age of 50 years. Breast 47.6% (30) was commonest site of tumor. 74.6% (47) presented with stage III disease. Prevalence of anemia in the study was 42.9%. At the end of therapy, 55.6% (63) cancer patients had their Hb level between 11.52-12.13 g/dl. At P-value>0.05 there was no statistical significance on distribution of mean Hb, standard deviation based on sex and treatment type.

Conclusion & Recommendation: Prevalence of anemia in cancer patients undergoing radiotherapy was 42.9% as shown by the blood film. However, at 95% confidence interval (95CI) radiotherapy had no significant impact on Hb level, hence Hb: 11.52-12.13 g/dl at the end of therapy. We recommend Hb of 11 g/dl as irreducible minimum level for cancer patients undergoing radiotherapy in Nigeria Oncology Centers.

Biography

Chinedu S Aruah was graduated in 2004 from University of Nigeria Nsukka (UNN) where he obtained MBBS 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 in 2013 during his dissertation work. He has a Master's degree in Public Health (MPH) from University of Nigeria Nsukka (UNN). He has 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.

aruasimeonedu@yahoo.com

Notes: