OMICS Group
Conferences
Accelerating Scientific Discovery

2ⁿᵈ International Conference on
Hematology & Blood Disorders
September 29-October 01, 2014   DoubleTree by Hilton Baltimore-BWI Airport, USA

Hematological abnormality and associated factors among children in HAART-naive and on HAART at Bahirdar Felege-Hiwot Referral Hospital, Northwest, Ethiopia

Mulugeta Melku[2], Yakob Gebregziabher[1], Zelealem Addis[2] and **Agerie Tadele[2]**
[1]Bahirdar Regional Health Research Laboratory, Ethiopia
[2]University of Gondar, Ethiopia

Background: Human Immunodeficiency Virus infection is a multi-system disease. Haematological abnormalities are among the most common complications of HIV/AIDS in children.

Objective: To assess hematological abnormalities and associated factors among children who were HAART-naive and on HAART at Felege-Hiwot Referral Hospital, Bahirdar, Northwest, Ethiopia, 2013.

Methods and Material: A comparative cross sectional study was conducted among children living with human immunodeficiency virus attending at Bahrdar Felege-Hiwot Referral Hospital. Systematic random sampling method was used to select the study participants. After full informed consent and assent was obtained, socio demographic data were collected using pre-tested structured questionnaires. Blood was drawn and haematological profile was obtained by performing haematological tests. The data were entered, cleaned and edited using EPI info version 3.5.2 and was exported in to SPSS version 20 for analysis. Descriptive statistics, independent t-test and chi-square were used for analysis. Both bivariate and multivariate logistic regression was employed to assess the association between outcome and independent variables on the basis of P value <0.05 at 95% confidence interval.

Result: The study enrolled 224 participants; 112 HAART-naive and 112 on HAART. The mean (SD) age of the children were 8(+3.46) years and mean (SD) CD4 percentage was 26.73+14.22. The prevalence of anemia, leucopoenia, and thrombocytopenia was 15.2%, 14.7% and 4.9% in HAART-naive whereas it was 14.3%, 12.9% and 3.1% on HAART respectively. CD4% and MCV had statistically significant mean difference between children in HAART-naive and on HAART. The prevalence of anemia in severe immune suppression was 47.5% and severity of immune suppression (AOR=3.97 (95% CI1.33-11.85) and Gastroenteritis (AOR=4.00, 95% CI1.10-14.53) were found to be the independent predictors of anemia while age 12-14 years were preventive factor. Leucopoenia was associated with oral esophageal thrush (AOR=5, 95% CI 1.6-16.9), being female (AOR=0.512 (95% CI 0.27-0.98), having farmer care giver (AOR=5.8 (95% CI (1.6-20.4) and having governmental employed care giver (AOR=4 (95% CI 1.14-14.37).

Conclusion: Hematologic abnormalities were common problems among the children in HAART-naive and on HAART. Therefore, especial emphasis should be given for investigation and management of haematological abnormalities among children living with HIV/AIDS, those who had low CD4%, with the presence of gastroenteritis and oral esophageal thrush.

mulugeta.melku@gmail.com

J Blood Disorders Transf 2014
ISSN: 2155-9864, JBDT an open access journal

Hematology-2014
September 29-October 01, 2014

Volume 5, Issue 8

Page 120