

QTC INTERVAL PROLONGATION IN HIV/AIDS PATIENTS TAKING ANTIRETROVIRAL DRUGS: A CASE CONTROL STUDY

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ABSTRACT

Background:

HIV is known to affect the heart and cardiovascular system. Cardiac manifestations of HIV and AIDS have become increasingly important causes of morbidity and mortality among the AIDS patients. Electrocardiogram (ECG) has shown abnormalities in AIDS patients whether or not they were suspected to have cardiac disease clinically.

Objective:

To find out QTc Interval prolongation in HIV/AIDS patients taking Antiretroviral drugs.

Method:

The study was done over a period of one year from August 2014 to July 2015 in the department of Medicine B. R. D. Medical College and associated Nehru Chikitsalaya, Gorakhpur. Consecutive patients registered at ART Centre were taken up which formed the “case group”. A “control group” of 200 subjects were selected by the process of matching, as HIV-ve presumably healthy individuals for comparison between them and the HIV+ve study subjects.

Results:

The mean age of the study subjects was 33.4 ± 7.1 years, with maximum incidence of AIDS in the 4th decade of life. The incidence of HIV seropositivity was more among males (80.11%). Majority of the patients i.e. 62.30% were diagnosed as having seropositive status for the last 6 months. 122 patients were on antiretroviral therapy at the time of inclusion, most of them (73.11%) were on ART since last 6 months. Majority of the patients did not have any symptoms related to cardiac disorder. On ECG recording QTc interval prolongation was found in 5.75 % of the patients. On comparison of the mean of the QTc interval between the patients on ARVs and the patients not on ARVs a statistically significant difference was found. ($p < 0.05$)

Conclusions

Antiretroviral therapy leads to QTc interval prolongation among the HIV/AIDS patients.

KEYWORDS: HIV/AIDS; QTc Interval, Antiretroviral Therapy, ECG, Case Control Study

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