FACTORS INFLUENCING KAPOSI'S SARCOMA TREATMENT OUTCOME AT UGANDA CANCER INSTITUTE

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A B S T R A C T

Uganda commonly diagnoses epidemic as well as endemic Kaposi's sarcoma cancer variants. A retrospective chart review of 1,483 Kaposi's sarcoma patient files for patients managed at Uganda Cancer institute in Mulago Referral Hospital, between 1st January 1998 and 31st December 2007 was conducted. The purpose was to estimate median survival times for patients on Kaposi's sarcoma treatment and establish factors explaining response to Kaposi's sarcoma treatment and survival.

Forms filled with abstracted data from patient charts were checked for completeness and accuracy and captured using Epidata software. Descriptive and bi-variate analysis, ordinal regression, Kaplan Meier survival functions, Cox modelling and other statistical tests were carried out using STATA 9.2. Forward and backward selection criteria were used in regression analysis.

Overall, patients' median age was 35 years, skewed to older ages in both sexes and in particular, endemic cases had a 44 year median age. Males (63%) were more than females and salary (27%) was the most reported source of earning. Most patients on treatment had HIV related Kaposi's Sarcoma (71%) and most were at cancer stage 3 (54%). Pulmonary involvement (15%) and pleural effusion (4%) were not common. More than half (54%) HIV patients were on Anti-Retroviral Therapy during treatment. Median survival time was 225 weeks overall and 200 weeks for HIV related Kaposi's Sarcoma. Completing treatment was the most important factor in improving treatment response among the unknown HIV status (Odds Ratio, 3.6; p<0.001) and the HIV positive cases (Odds Ratio, 3.0; p<0.001). Completing treatment was again significant in improving survival (Hazard Ratio, 0.2; p<0.001) among other factors. Pulmonary involvement predicted poor treatment response and risk of death (Hazard Ratio, 3.1; p<0.001). Initiating Anti-Retroviral Therapy (Hazard Ratio 0.7, p=0.021) and use of Bleiomycin/Vincristine combination versus Vincristine therapy (Hazard Ratio 0.6, p=0.020) significantly increased chances of survival amongst HIV related Kaposi's Sarcoma patients whereas pulmonary involvement, pleural effusion and poor risk TIS predicted risk of death.

Undertake early diagnosis, referral and treatment for Kaposi's sarcoma for better outcome. HIV serology tests should be carried out on all patients during baseline diagnosis. Among Epidemic Kaposi's sarcoma patients, routinely observe for a complete TIS staging. Furthermore, initiate Anti-Retroviral Therapy to improve survival. Counsel patients to complete treatment. Unless dictated by other reasons, Bleiomycin/Vincristine combination therapy is recommended. A prospective research on treatment response and survival of KS patients is recommended.