



Heart Failure

CARDIOTOXICITY ASSOCIATED WITH CHEMOTHERAPY FOR BREAST CANCER

Poster Contributions

Poster Sessions, Expo North

Saturday, March 09, 2013, 10:00 a.m.-10:45 a.m.

Session Title: Dilated Cardiomyopathies: From Peripartum, Cancer Therapy, Familial Cardiomyopathies to Cardiac Amyloidosis

Abstract Category: 15. Heart Failure: Clinical

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Background: Congestive heart failure (CHF) is an important cause of morbidity and mortality in North America. Certain cancer drugs pose a significant risk for heart failure that is poorly understood by both physicians and the public. We aimed to define the risk of CHF associated with the use of adjuvant chemotherapy (ACT) for early stage breast cancer.

Methods: We conducted a population health study of all women with a new diagnosis of breast cancer in Ontario between 2007-09. We used administrative data to define ACT use and health outcomes. We calculated the incidence rate of CHF over a 1 year follow-up period. We also conducted an age-matched comparison of patients in the treated group with the untreated group. Logistic regression was used to control for other factors associated with CHF.

Results: The CHF incidence rate was higher in all age groups of patients receiving ACT with the exception of the oldest (> 81 year)(Figure). The age-matched sub-study also demonstrated that CHF incidence was higher in the ACT group (2.5%) compared to untreated group (1.0%, p, 0.001). Finally, we found that the odds of a CHF outcome were 6.7 times higher in the ACT group than the untreated group, when adjusting for age and cardiac history.

Conclusions: Chemotherapy regimens currently used in the treatment of breast cancer result in a significantly greater incidence of CHF than in age matched untreated patients. It is important to recognize this risk factor for CHF and appropriately follow patients at increased risk following chemotherapy.

