

Abstract Title: INCIDENCE AND OUTCOMES OF CHEMOTHERAPY-INDUCED CARDIOMYOPATHY PATIENTS AMONG REFERRALS FOR ADVANCED HEART FAILURE

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Approximately 2-3% of patients undergoing advanced heart failure therapies such as left ventricular assist devices (LVAD) and orthotopic heart transplantation (OHT) have chemotherapy-related cardiomyopathy (CCMP), according to analyses of large databases such as United Network for Organ Sharing (UNOS) or INTERMACS registries. While these studies have shown similar survival outcomes post-interventions, these databases by definition exclude patients referred for advanced therapies.

Given the lack of nuance in the diagnoses and the possibility that many CCMP patients might be misclassified by the generic “non-ischemic” or “dilated” cardiomyopathies, we investigated the incidence of CCMP among advanced HF referrals at a single high volume institution and hypothesized that survival would be similar between patients with CCMP compared to other cardiomyopathies (O-CMP)

All referrals over the past three years were evaluated for type of cardiomyopathy, with careful chart review to ensure accuracy. In addition, outcomes such as LVAD, OHT and death were compared between CCMP and O-CMP.

Of 573 referrals for advanced HF, 23 (4%) were for CCMP. There was a higher percentage of patients receiving advanced therapies in the CCMP vs. O-CMP (39% vs 27%, $p=0.206$). Of the CCMP patients, 3 had OHT directly, 2 had LVAD followed by OHT, and 4 had LVADs as bridge to candidacy or destination therapy, and there were no deaths among those receiving advanced therapies. 60.9% of the CCMP did not receive LVAD or OHT compared to 72.9% of the O-CMP ($p=0.21$). Among these, there was only 1 death in the CCMP group compared to 66 in the O-CMP (7.14% vs 16.45%; $p=0.37$)

In a single institution, CCMP accounts for approximately 4% of all referrals for advanced HF therapies. Contrary to concerns for previous cancer and sequelae of cancer-related therapies excluding patients for advanced therapies, a higher percentage of CCMP underwent advanced HF therapies and with similar outcomes. There was no difference in mortality for those who did not receive either LVAD or OHT. In conclusion, patients with CCMP referred for advanced therapies have similar survival to other patients regardless of the selected management strategy.

