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## Heart Failure

### DOES STRICT DIABETIC CONTROL AFTER HEART TRANSPLANTATION LEAD TO BETTER OUTCOME?

ACC Moderated Poster Contributions

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**Background:** Diabetes after heart transplantation is very common due to preexisting diabetes and diabetogenic anti-rejection medications such as the calcineurin inhibitors and corticosteroids. From various registries, diabetes has been found to be a risk factor for the development of transplant coronary artery disease (TCAD) and mortality after HTx. In the non-transplant population it has been suggested that better diabetic control (maintaining HbA1c<6) may result in less development of native CAD. The effect of strict diabetic control on the development of CAV in heart transplant patients has not been established.

**Methods:** Between 2000 and 2010 we evaluated 62 diabetic heart transplant patients who were on diabetic medications for at least 6 months within 2 years of transplant. Mean HbA1c levels were recorded and compared to 5-year survival, freedom from TCAD (angiographic stenosis 30%), freedom from non-fatal major adverse cardiac events (NF-MACE: MI, CHF, stroke, PCI, and ICD or defibrillator). Diabetic patients were divided into those with normal HbA1c (< 6), modestly elevated HbA1c (6-7), and high HbA1c(> 8). Patients without diabetes (conditional 1-year survival, n=1057) during this time period were used as a control group.

**Results:** Of the 62 diabetics, 46 were insulin dependent and 16 were on oral medications. All 3 HbA1c (Normal n=19, Modest n=25, High n=18) groups had similar 5-year actuarial survival (95%, 88% 83% respectively, p=0.56), freedom from CAV (79%, 88%, 89% respectively, p=0.65) and freedom from NF-MACE (79%, 76%, 61% respectively, p=0.39). Similarly, the diabetic group compared to the non-diabetic group had comparable 5-year freedom from CAV ( 86% vs. 83%, p= 0.56).

**Conclusion:** Despite diabetes itself being a risk factor for the development of TCAD, diabetes control with respect to HbA1c does not appear to reduce this risk.