**Safety and tolerability of high intensity statin therapy in heart transplant patients receiving immunosuppression with tacrolimus**

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**Purpose/Background:** Following heart transplantation (HT), HMG CoA reductase inhibitors (statins) have been shown to reduce total and low-density lipoprotein (LDL) cholesterol, development of cardiac allograft vasculopathy (CAV), and mortality. Several studies in HT patients have demonstrated the safety and efficacy of low or moderate intensity statins, however little data exists using high intensity (HI) statins in patients receiving tacrolimus.

**Objective:** The aim of this study was to evaluate the safety and efficacy of HI statins compared to moderate intensity statins in HT recipients.

**Methods:** This single center, retrospective analysis included adult HT recipients from January 1, 2005 to December 31, 2015 who received tacrolimus and HI statin therapy during post-transplant follow-up. The primary outcome, tolerability, was defined as the absence of myalgias, hepatotoxicity, rhabdomyolysis, or HI statin dose reduction/discontinuation due to adverse drug events. The secondary end point was the mean reduction in total and LDL cholesterol after the conversion.

**Results:** A total of 153 heart transplants were assessed for inclusion. The composite tolerability endpoint was 96% (p = 1.00). Among the 24 patients included, one experienced myalgias and discontinuation of therapy. No other HI statin dose reduction/discontinuation occurred within 6 months post-conversion, and no instances of rhabdomyolysis or hepatotoxicity were observed. The average reduction in total and LDL cholesterol after conversion to HI statin was 35 mg/dL (p = 0.02) and 19 mg/dL (p = 0.10), respectively.

**Conclusion:** HI statin therapy appears safe and efficacious in HT recipients receiving tacrolimus and is a reasonable option for treatment of hyperlipidemia refractory to lower intensity statins.