**CORRELATION BETWEEN HYPOMAGNESEMIA AND CORONARY VASCULOPATHY POST HEART TRANSPLANT**

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Objective: The study was carried out to investigate the possible correlation between hypomagnesemia and vasculopathy in post cardiac transplant patients.

Background: It is known that hypomagnesemia has detrimental effects on patients with IHD and CHF. Hypomagnesemia is associated with obliterative arteriopathy that complicates cardiomyopathy in animal models. No human studies have shown the correlation. Hypomagnesemia in transplant patients occur secondary to immunosuppressants and diuretics.

Methods: In this retrospective single center study; data from 127 patients with cardiac transplant have been reviewed. Coronary artery vasculopathy occurred in 32 patients and it was noted that the average magnesium level among these patients was 1.62 mg/dl. Average magnesium levels among patients without vasculopathy were 1.78 mg/dl. The difference was statistically significant (p< 0.003). Of note, patients without vasculopathy were more common to be on magnesium supplements. Our study confirmed the findings, previously noted at a smaller patient size, that hypomagnesemia in transplanted patients has no correlation with prolonged QT interval or arrhythmias.

Conclusions: Hypomagnesemia is most likely associated with post transplant vasculopathy as shown in this retrospective analysis, and should be treated. Further prospective analysis is needed to confirm this findings.