

**Conclusions** Increasing of LVM is common in postoperative patients with OHT, and some of them develop LVH, and the ratio of LVH increase continually with the time. Hypertension and AR events are risk factors for causing LVH.

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### ASSESSMENT OF LEFT VENTRICULAR MASS IN POSTOPERATIVE PATIENTS WITH ORTHOTOPIC HEART TRANSPLANTATION BY ULTRASOUND ECHOCARDIOGRAPHY

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**Objectives** After orthotopic heart transplantation (HT), hypertension commonly occurs because of adverse effects of immunosuppression. Left ventricular hypertrophy (LVH) has been shown to predict increased cardiovascular morbidity and mortality. The aims of this study were to observation of LV structure changing over time in patients after HT, and to investigate the roles in LV remodelling.

**Methods** Conventional two-dimensional echocardiography to scan control healthy subjects and patients with HT after 3 months (A group), 6 months (B group),  $\geq 12$  months (C group) operation. Left ventricular end-diastolic dimension (LVEDD), inter ventricular septal end-diastolic thickness (IVST) and posterior end-diastolic wall thickness (PWT) were measured. Left ventricular mass (LVM) were calculated according to the formula by ASE recommended. Evaluate of LVH rate at 3 months, 6 months, and 1 year and above.

#### Results

1. LVEDD was no significant difference between each group ( $p > 0.05$ ). But IVST, PWT in each group of HT were larger than in control group, and in group C was larger than in group A and B (all  $p < 0.05$ ), but there were no significant difference between group A and B ( $p > 0.05$ ).
2. Value of LVM in HT groups were higher than in control group, and LVM was higher in group B and C than in group A ( $p < 0.05$ ), however, there were no statistically significant difference between group B and C ( $p > 0.05$ ).
3. LVH rate in group A, group B, group C was 20%, 34.6%, 54.2% respectively, increased with time of post operation. But the univariate analysis indicated that there was no significant correlation between LVM and postoperative time ( $r = 0.28$ ,  $p < 0.05$ ), and there were significantly related with the incidence of hypertension. In multivariate analysis, hypertension and acute rejection (AR) events were risk factors for causing LVH. Moreover, LVM in hypertension group of HT was higher than in non-hypertension group of HT ( $p < 0.05$ ), as well as of HT with AR.