

P96. Influence Of Pulmonary Hypertension On Early Clinical Outcome Following Mitral Valve Repair

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OBJECTIVES: Pulmonary hypertension is recognized as a cause of premature mortality. Mitral valve disease can result in secondary pulmonary hypertension (PH). Our aim was to ascertain the impact of pre-operative PH on early clinical outcome following mitral valve repair.

METHODS: Demographic, operative and clinical data were obtained retrospectively through casenote review. All operations were performed by a single surgeon. Patients underwent pre-operative right heart catheterization for measurement of pulmonary artery pressure. Patients with a mean pulmonary arterial pressure (MPAP) > 25 mm Hg were considered to have PH.

RESULTS: Between 1st January 1999 and 1st January 2006, pulmonary artery pressure was measured by cardiac catheterization in 139 patients. Sixty-seven patients were classified as having pulmonary hypertension with a mean pulmonary artery pressure (MPAP) > 25 mm Hg, the average MPAP in this group was 35 +/- 8 mm Hg compared to 19 +/- 4 mm Hg in the 72 patients without PH. Mean time to follow-up was 2 +/- 1.9 years. Pre-operative PH did not result in an increase in morbidity or 30-day mortality (Table 1). Furthermore, it was not an adverse predictor of mortality at follow-up on multivariable analysis (p=0.96). One year actuarial survival was not significantly different between groups (90.4% versus 96.5%, p = 0.44).

CONCLUSIONS: Secondary PH in patients with mitral valve disease is not associated with an increase in morbidity or mortality following mitral valve repair.

Table 1

	MPAP > 25 mm Hg	MPAP < 25 mm Hg	p value
Average MPAP, mm Hg (SD)	35 (8)	19 (4)	<0.0001
PA systolic pressure, mm Hg (SD)	57 (14)	33 (7)	<0.0001
PA diastolic pressure, mm Hg (SD)	24 (7)	13 (3)	<0.0001
Time to extubation, hrs (SD)	7.9 (4.5)	8.0 (4.9)	0.54
ITU stay, hrs (SD)	31 (29)	28 (23)	0.86
30-day mortality, n (%)	1 (1.5)	0 (0)	0.42