

## Long Term Follow-Up in Marfan Patients After Successful Surgery for Acute Type A Aortic Dissection. The IRAD Experience

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### **Background:**

The long-term outcome after successful surgery for aortic dissection (AD) in patients with Marfan's syndrome (MS) is not. The large patient cohort in IRAD facilitates the investigation of long-term outcomes in surgically managed acute type A AD pts with MS compared to those without the disease.

### **Methods:**

775 surgically-managed Type A AD pts enrolled in IRAD, with follow-up available at 1, 2 and/or 3 years post-discharge. The pts were divided into groups based on presence (n=36, 4%) or absence of MS.

### **Results:**

The mean age was significantly lower for MS pts ( $34.8 \pm 10.3$  years vs  $60.0 \pm 12.4$  years [p 0.001]). They also had more aortic insufficiency at presentation (68.8% vs 39.5% [p=0.001]). More MS pts were normotensive on presentation (64.7% vs 44.1% [p=0.018]). Significantly more concomitant procedures were performed in the MS group (60% compared to 36% [p=0.004]). Their aortic root dimension was larger (5.8 cm compared to 4.2 [p0.001]). Extension of dissection was higher in the MS (9.1%) compared to the non-MS group (1.5%) (p=0.021).

Systolic blood pressure was lower at one year ( $119.2 \pm 12.4$  vs  $130.3 \pm 21.5$  [p=0.036]) and at three years ( $114 \pm 5$  vs  $131 \pm 17$  [p=0.026]) in MS pts. Also at three years the total aortic diameter was significantly increased in 66.7% of MS pts compared to 21.3% in the non-MS group (p=0.024).

Kaplan-Meyer survival curve showed no significant difference in survival between the two groups from discharge to three year follow-up.

### **Conclusion:**

Despite the absence of difference in mortality at three years follow-up, our data shows that MS pts after surgery for type A AD have lower systolic blood pressure and increased total aorta diameters on follow-up. The presence of increase diameters suggests closer follow-up is important for pts with MS.