

## **Aortic Valve Gradient Significantly Reduced Short Period Post Aortic Valve Replacement**

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**Background:** Despite limitations the transvalvular gradient (TVG) still is commonly used as one of the surgical procedure success indicators post aortic valve replacement. The importance of immediate post operative, prosthetic-patient mismatch after Aortic valve replacement is still unclear. We sought to explore the dynamic of the transvalvular gradient along the early period after the surgery.

**Methods:** One hundred fifty four consecutive patients who aortic valve replacement between the years 2005-2007, formed the final study group. All the patient had echocardiographic test few days postoperative ( $1\pm 0.5$  weeks) and the results were compared to the late postoperative echo that was conducted ( $9.1\pm 8.1$  weeks) later.

**Results:** TVG was significantly higher on the immediate postoperative echo measurements comparing with the later test with average peak TVG of  $37.31\pm 15.29$  and mean TVG of  $19.68\pm 7.86$  comparing with  $32.31\pm 12.1$  and  $17\pm 7.6$  accordingly ( $p < 0.006$ )

**Conclusion:** TVG as measured few days post operation must be reviewed a few weeks later as the TVG is significantly decrease and the early result does not reflect the actual TVG.