Transcatheter Aortic Valve Replacement (TAVR) at John Muir Health

Fulfilling an unmet need for treating patients at intermediate and severe surgical risk for aortic stenosis.

What is severe aortic stenosis?

• In the TAVR procedure, a new valve is delivered through a catheter to the inside of the diseased aortic valve
• Once inside the diseased valve, the new valve is expanded, pushing aside the diseased valve
• Multiple studies have confirmed the effectiveness and safety of the procedure
• Over 200,000 TAVR procedures have been completed worldwide, with over 50,000 performed in the U.S.

Why John Muir Health

• Our highly experienced heart team provides a comprehensive diagnostic and treatment plan for each TAVR patient
• We were one of the first three hospitals in the Bay Area to perform this procedure starting in 2012
• Over 200 TAVR procedures completed at JMH
• Excellent outcomes, exceeding national benchmarks

Aortic stenosis (AS) is a narrowing of the aortic valve, often caused by a build-up of calcium on the aortic valve leaflets

• Reduces the ability of the left ventricle to pump blood to the brain and the rest of the body
• Typically affects patients in their 70s and 80s who have additional co-morbidities
• Chance of death in symptomatic patients without aortic valve replacement is 50% at two years, and 80% at 5 years*

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What your patients can expect

During the procedure
• Each procedure is performed by a dedicated heart team which includes an interventional cardiologist, cardiac surgeon, cardiac anesthesiologist and often an imaging cardiologist
• The patient is placed under a conscious sedation or general anesthesia, and a catheter containing a valve delivery system is inserted in the groin (transfemoral approach), ribs (transapical approach) or directly into the aorta (transaortic approach)
• When the delivery system reaches the diseased valve, the new valve is expanded into place
• The new valve pushes the diseased leaflets aside and then uses them to secure itself in place
• Once in place, the delivery system is removed
• The interventional cardiologist and surgeon will ensure the new valve is working before closing the incision site

After the procedure
• The procedure usually takes 1 to 2 hours, the average hospital stay is 1 to 3 days, and most patients are up and walking by the day after the procedure
• After discharge from the hospital, it takes about 2 to 3 weeks to fully recover from TAVR
• Most patients can expect an improvement in symptoms - reduced shortness of breath, less fatigue, and amelioration of angina or presyncope
• Patients are expected to participate in a comprehensive follow-up program to ensure full recovery, with follow-up visits at 1 month and 12 months in the first year following the procedure

For more information or to facilitate a patient referral, contact:

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