



Community **HEALTH BEAT**

Quality Healthcare Close To Home

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Do I Need a Valve Job?

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*Blue Mountain Hospital Visiting Specialist
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Heart valves perform the same function as the valves in your home plumbing, your car, or an industrial plant, that is to prevent backflow. Right in the middle of your heart, we have two Mercedes Benz insignias, the aortic and pulmonary valves. The most common heart valve operation in adults is replacement of the aortic valve (the valve between the heart's main pumping chamber, the left ventricle, and the big artery leaving the heart, the aorta). A small percentage of these cases are for a *bicuspid aortic valve*, a congenital abnormality of the valve (the person was born with only 2 leaflets, instead of the normal 3; *no Benz!*). Even fewer cases are because the valve became infected or the aorta is aneurysmal (severely enlarged). Most commonly, though, the aortic valve degenerated with time. As we enter our 60s, 70's, and 80's (those so-called golden years), the valve starts to show signs of wear from the 100,000 cardiac cycles/day (over 2 billion openings and closings by your 60th birthday!). This degeneration appears as valve leaflet thickening and then calcification when evaluated by echocardiography (or echo, ultrasound of the heart structures and function). It is, by far and away, the most common cause of new murmurs in older individuals (by older, I mean those of you with acquired wisdom).

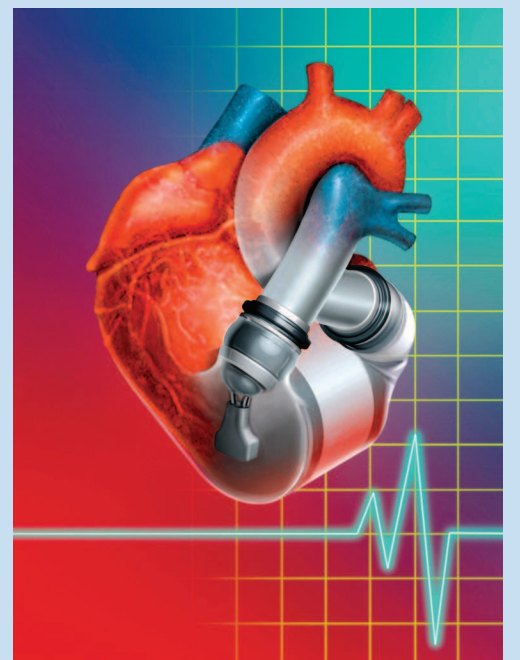
The valve can fail in 3 ways: stenosis (narrowing of the valve opening because the leaflets won't open fully), regurgitation (leakage because the leaflets don't fully close), or both. The most common complaints include chest pressure with exertion, heart failure (shortness of breath with exertion), or passing out. If you develop these symptoms, your primary care practitioner will

become suspicious based on your exam because you will have a prominent heart murmur (a whooshing sound caused by turbulence during each heart cycle). Most of the time, the murmur is noted years before any symptoms develop. The echo study is noninvasive, free of radiation, and often diagnostic for the cause of the murmur.

Surgical replacement of the aortic valve has been around for over 50 years. In fact, the first surgical valve replacement was performed in Portland by Dr. Albert Starr, and until the 1990s, the mechanical valve he designed was still being implanted. Surgical Aortic Valve Replacement (SAVR) is the 2nd most common open heart procedure performed (after coronary bypass surgery), and both mechanical valves (carbon leaflets) and tissue valves (pig heart tissue) are used. The type of valve is chosen based on the patient's age, life expectancy, risk of taking blood thinners (for the mechanical valves), and for young women, anticipation for future pregnancy.

Despite 50 years of experience and advancements in surgical and anesthetic techniques, there remains serious risks to the operation and being on the heart-lung machine while the heart is stopped. In 2005, the first aortic valve replacement not requiring cutting open the chest was performed in France. This less invasive procedure, Transcatheter Aortic Valve Replacement (TAVR), was approved in the US in 2011. Early on, patients who were turned down or high risk for SAVR, were the only ones approved for the new procedure. In 2016, however, new research led to FDA approval for moderate risk patients and low risk patients are currently being studied. Because the transcatheter procedure can only implant tissue valves, which only last 10-15 years before needing replacement, there will always be a need for the surgically placed mechanical valves (which can last for more than 30 years). At St. Charles Heart & Lung Center in Bend, we have two experienced doctors (Drs. Matt Slater and Dr. Saurabh Gupta, both recruited from OHSU) who have been seeing potential candidates for TAVR in the Valve Clinic since last summer and performing TAVR since the fall.

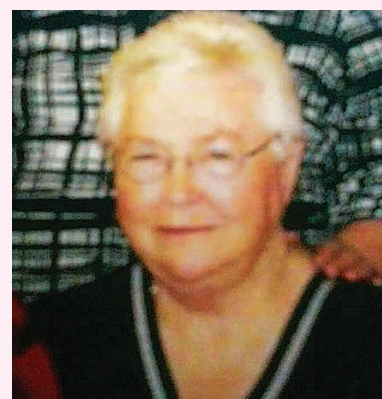
I believe that if we lived to be 150, we would *all* need aortic valve replacement, and Drs. Slater and Gupta would be our mechanics.



Presents...

February Visiting Specialists

- 1st - Dr. Barrett - Bend Urology
- 2nd - Dr. Rushton - Baker Podiatrist
- 6th - Dr. McLellan - Bend Carido
- 13th - Dr. Rushton - Baker Podiatrist
- 22nd - Dr. McLellan - Bend Carido
- 27th - Dr. Rushton - Baker Podiatrist



Joyce Dowdy

Joyce and Ronald Dowdy just celebrated their 60th Wedding Anniversary in August. They have three children, 9 grandchildren and (25)/ 22 living great grandchildren. Joyce lived most of her life in the Willamette Valley. She has

always lived on a farm or ranch. The Dowdy's raised registered pigs, Cotswold sheep and Cattle. Joyce gave many local dairy farmers vacations by milking their cows. Joyce was a bus driver, bean boss, strawberry boss in the summers. She was homeroom Mom for all of her kids. So everyone remembers Joyce as the School Mom.

Joyce and Ronald took many animals to the Lane County Fair. The crowds most enjoyed the brand new baby pigs born at the fair. The Dowdy's moved to Grant County in 2006 to be near their family. We have 49 at our family gatherings now.

Joyce is a joyful person who makes many people laugh. She is a #1 joke teller with an awesome sense of humor.