Welcome to the **South Denver Cardiology** Structural Heart Clinic



Meet the Team: **SDCA Physicians**



Lee MacDonald, MD



Sean Enkiri, MD

CCVSA Physicians



Sanjay Tripathi, MD

Nurse Practitioners



Kristi Swim



Whitney Groth



Shari Nieman

Leading the way to Recovery

Nurses & Cardiac Techs and Support Staff



Megan Smerchek, RN





Barb Poelstra, RN Tiffany Kramer, CT Darli Miravete, CT







Lindsay Nelson, CT Vanessa Archuleta





Structural Heart Clinic Patient Guide

South Denver Cardiology: 303-744-1065

TAVR Clinic: 303-738-3098

CCVSA Surgeons Office: 303-778-6527

www.SouthDenver.com



We would like to welcome you to the South Denver Cardiology Structural Heart Clinic. You were referred to our clinic because you have been diagnosed with heart valve disease. Our specialty clinic aims to work together to determine the best treatment option for you.

We treat a variety of heart valve issues, but most of our patients have been diagnosed with aortic stenosis. Without valve replacement, aortic stenosis is progressive and lifethreatening. Typically, the valve is replaced with either surgical aortic valve replacement through open-heart surgery or, more commonly, non-surgical transcatheter aortic valve replacement (TAVR). Through testing, we will determine the best treatment option for your personal case.

We are honored that you have decided to pursue your cardiac care with us, and we will do our best to make this experience seamless and personalized. We pride ourselves on the delivery of cutting-edge care as we have done in our main clinic since its inception.

Your Structural Heart Clinic team,

Lee MacDonald, MD

Sean Enkiri, MD

Kristi Swim, Nurse Practitioner

Megan Smerchek, RN

Tiffany Kramer, MA

Darli Miravete, MA

Lindsay Nelson, MA

Brooklyn Olsen, Scheduler

Whitney Groth, Nurse Practitioner

Shari Nieman, Nurse Practitioner

Barb Poelstra, RN

Alicia Peck, Scheduler

Vanessa Archuleta, Scheduler

What is Aortic stenosis?

The heart is made up of four chambers, each separated by a valve that serves to keep blood from flowing backward. The aortic valve is the last valve of the heart that separates the heart from the rest of the body. Just beyond the aortic valve is the aorta, the body's main



artery that delivers blood to all organs, including the brain, kidneys, and heart. Aortic valve stenosis is a stiffening of the aortic valve. This prevents blood from being fully and easily pumped out of the heart, which can ultimately result in heart failure and death. Aortic stenosis is a progressive disease, and once symptoms appear, it is very important to seek specialty management. Without treatment, half of the patients with severe, symptomatic aortic stenosis will die within two years.

What are the symptoms of Aortic Stenosis?

- Shortness of breath
- Chest pain
- Lightheadedness, dizziness, or fainting
- Fatigue/sleepiness
- Swollen ankles or feet
- Difficulty breathing during sleep with the need to sleep sitting up
- New exercise intolerance
- Inability to do activities that you used to

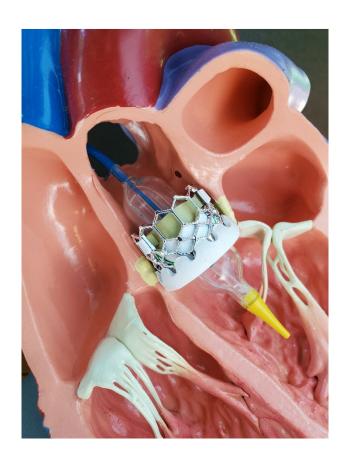


What is TAVR?

TAVR (transcatheter aortic valve replacement) is a minimally invasive method to replace the aortic valve without open heart surgery. The TAVR procedure has become the standard for aortic valve replacement with severe symptomatic aortic stenosis in appropriate patients as determined by pre-



procedure testing. TAVR is a less-invasive procedure then open-heart surgery, and is performed by a cardiologist in the cath lab at Swedish Medical Center. Through a small incision in the groin, a balloon catheter is used to implant a new valve inside the diseased aortic valve. Advantages to the TAVR procedure compared with surgical aortic valve replacement include a shorter hospital stay, significantly less downtime after the procedure, and better patient outcomes.



How will I know if I am a candidate for the TAVR procedure?

First, we will determine the severity of your disease during an appointment with either one of our nurse practitioners or one of our physicians. If you are symptomatic and your aortic stenosis is severe, we will begin



the necessary testing to see which treatment strategy is best for you. Not everyone qualifies for TAVR, it depends on your body's anatomy and the presence or absence of other structural issues. Multiple tests will help us determine the appropriate strategy for you.

Pre-TAVR testing/appointments include:
Echocardiogram: Assesses your heart function and get an in-depth look at the valv
Carotid ultrasound study: Looks for blockages in your carotid arteries in your neck
Spirometry: Assesses lung function
Angiogram/heart cath: A procedure to check pressures in your heart as well as checking for blockages in your coronary arteries. You will have to spend the day, and possibly the night in the hospital, for this procedure
TAVR CTA (cat scan): Looks at the leg arteries, the aorta, and the aortic valve to determine the size and type of valve we need to use
Appointment with one of the cardiovascular surgeons from Colorado Cardiovascular Associates: Dr. Sanjay Tripathi will be present during the procedure, and he w
assist in the determination of which method of valve replacement is best for you.

30 Day Heart Monitor

A 30 day heart monitor is given to you the week before your TAVR procedure (usually Thursday or Friday ahead of your Monday procedure). The wonderful thing about TAVR is that you, generally, are only in the hospital for one night! We like to keep our eye on you for a longer period of time, however, so we set you up with a heart monitor for 30 days after your procedure to ensure that your heart rate and heart rhythm are appropriate after your valve is replaced. The heart monitor is a small device that clicks into a sticker that is placed over your sternum; it communicates with a smart phone that gives us a warning if anything abnormal is discovered, whether or not you may feel it! This device can be worn in the shower and the sticker can stay on for a week or more as long as the skin contact is adequate.

We use the company, **Preventis**, for all of our monitors. They are the true troubleshooting experts. Their direct patient care line is **888.500.3522** (**press 1, 1**) and they are available 24 hours a day, 7 days a week. Calling this number gets you to a person, not a robot, to help you troubleshoot any issue you may come across. Of course, during normal business hours the staff at South Denver Cardiology can also do our best to assist you!

How will I know if I am a candidate for the TAVR procedure?

First, we will determine the severity of your disease during an appointment with either one of our nurse practitioners or one of our physicians. If you are symptomatic and your aortic stenosis is severe, we will begin



the necessary testing to see which treatment strategy is best for you. Not everyone qualifies for TAVR, it depends on your body's anatomy and the presence or absence of other structural issues. Multiple tests will help us determine the appropriate strategy for you.

Pre-TAVR testing/appointments include:
Echocardiogram: Assesses your heart function and get an in-depth look at the valv
Carotid ultrasound study: Looks for blockages in your carotid arteries in your neck
Spirometry: Assesses lung function
Angiogram/heart cath: A procedure to check pressures in your heart as well as checking for blockages in your coronary arteries. You will have to spend the day, and possibly the night in the hospital, for this procedure
TAVR CTA (cat scan): Looks at the leg arteries, the aorta, and the aortic valve to determine the size and type of valve we need to use
Appointment with one of the cardiovascular surgeons from Colorado Cardiovascular Associates: Dr. Sanjay Tripathi will be present during the procedure, and he w
assist in the determination of which method of valve replacement is best for you.

30 Day Heart Monitor

A 30 day heart monitor is given to you the week before your TAVR procedure (usually Thursday or Friday ahead of your Monday procedure). The wonderful thing about TAVR is that you, generally, are only in the hospital for one night! We like to keep our eye on you for a longer period of time, however, so we set you up with a heart monitor for 30 days after your procedure to ensure that your heart rate and heart rhythm are appropriate after your valve is replaced. The heart monitor is a small device that clicks into a sticker that is placed over your sternum; it communicates with a smart phone that gives us a warning if anything abnormal is discovered, whether or not you may feel it! This device can be worn in the shower and the sticker can stay on for a week or more as long as the skin contact is adequate.

We use the company, **Preventis**, for all of our monitors. They are the true troubleshooting experts. Their direct patient care line is **888.500.3522** (**press 1, 1**) and they are available 24 hours a day, 7 days a week. Calling this number gets you to a person, not a robot, to help you troubleshoot any issue you may come across. Of course, during normal business hours the staff at South Denver Cardiology can also do our best to assist you!

Planning for your TAVR



Diet & Activity

- Ask your Heart Team what level of activity is suitable for you leading up to the procedure. It is important to stay physically active if able
- Be sure to have someone nearby to monitor you during exercise in case you experience any serious issues (i.e., shortness of breath, chest pain, dizziness, etc.)
- It's best to follow a low salt diet

Planning for Post Procedure

- Let the team know if you have an advanced care plan, such as medical power of attorney or DNR
- Make arrangements for someone to drive you to and from the hospital
- You will be in the hospital at least overnight depending on your health prior to the procedure and how the procedure goes

The night before your procedure

- Remove all nail polish
- Take a bath or shower and clean yourself well. After you bathe, don't use lotions, creams or powder

The day of the procedure

- Do not eat or drink the morning of the procedure
- If your doctor told you to take your medicines on the day of the procedure, take them with only sips of water
- Be sure to take off all jewelry and piercings, and take out contact lenses

What Lies Ahead - post TAVR

Medications



After your procedure, it is important to take your medications as prescribed. You must take every dose of your anti-platelet medication clopidogrel (Plavix). You will be on this medication for three to six months, and you will take a baby aspirin for life.

Preventing infection

Bacteria can damage your new heart valve and can be very dangerous. It is important to take prophylactic, or preventative, antibiotics before ALL dental cleanings and invasive procedures for life. We prefer that you delay any non-emergent procedures/surgeries/testing for at least three months. Please make sure all of your care providers are aware that you have had a valve replacement. If you need a prophylactic antibiotics, please call the structural heart RN at 303-744-1065 at least five days before your planned procedure or dental cleaning.

Caring for your incisions

It is normal for your groin incisions to be bruised, itchy or sore for a few weeks. Look at your incisions daily. Wash your incision gently with warm soapy water. Do not use lotions or ointments on the incisions until they have healed. Avoid baths, hot tubs, and pools for 1 week after your procedure.

You may have some bruising or slight tenderness at your incision site which is normal. An increase in swelling, redness, or tenderness needs to be addressed by someone on the structural heart team. Please call the structural heart nurse with any concerns.

Activity restrictions

It is important to ease back into your routine, and it is equally important to start moving more as time goes on. Walking is one of the best ways to get stronger. Avoid heavy lifting, pushing, pulling, or straining for one-week post procedure.

- Do not lift anything over 10-15 lbs for the first week and avoid weight lifting exercises for 2-3 weeks
- Resume your normal activity at about 50% the first week, 75% the second week and resume all normal activity the third week

Cardiac Rehab

As a post TAVR patient, cardiac rehab is highly recommended to re-condition your heart and increase your endurance. The South Denver cardiac rehab program is typically 12 weeks long, three one-hour sessions a week. A representative from cardiac rehab will call you within 1-2 weeks after your TAVR.

When to call the Doctor

- Chest Pain or trouble breathing (Call 911)
- Fever of 100.4°F or higher
- Dizziness or fainting
- Increased swelling, warmth, redness or bleeding at the incision site
- Sudden weight gain (more than 2 lbs in one day or 5 lbs in one week)
- Severe pain that is not relieved with medications

