

**SHARONNE HAYES:**

Hello. I'm Dr. Sharonne Hayes. I'm a cardiologist at Mayo Clinic and founder of the Women's Heart Clinic at Mayo Clinic in Rochester, Minnesota. I'm one of the lead investigators for SCAD, or a spontaneous coronary artery dissection.

Mayo Clinic began studying spontaneous coronary artery dissection about five years ago. Our research program and clinical practice have grown exponentially since then, as we have discovered that SCAD is far more common and far more challenging to treat than anyone ever believed.

SCAD is a type of heart attack. It's relatively uncommon, compared to the typical heart attack most have heard about. Most heart attacks happen when plaque builds up in their arteries over a lifetime. And this causes blockage and a heart attack.

In SCAD, a sudden tear occurs inside an artery. And that can cause a blockage that leads to a heart attack. Even though it's less common, SCAD is an important cause of heart attacks in younger people.

Making a proper diagnosis is critical, because the treatments and outcomes for SCAD need to be different from heart attacks due to plaque or atherosclerosis. We don't know enough about SCAD, and it's not clear what causes it, in most cases. But this is what we do know.

First, SCAD affects women more often than men. Up to 80% of patients with SCAD are women. The average age of SCAD is 42. But I have patients in my practice as young as 19 and a few in their early 70s.

SCAD patients are typically otherwise healthy, with few disease risk factors. They eat well, exercise, don't smoke. And about 20% of women SCAD sufferers have recently given birth.

Mayo Clinic today is the leader in treating SCAD patients, because two women who experienced SCAD, approached me at an educational conference for women with heart disease about five years ago. And they asked if Mayo was studying SCAD. At the time, we were not.

They challenged me to do more. And their passion and commitment inspired me and our growing clinical and research team to take action. As a direct result of that encounter, we now have a team of physicians, scientists, and trainees working on SCAD research.

We've created two SCAD patient registries. One builds a database of patients with SCAD. And the other feeds a biobank of blood samples from SCAD survivors and their parents to see if genetic factors play a role in SCAD. We have collected more than 500 DNA samples. Analysis of the information we have collected has already changed the way we take care of and evaluate SCAD patients.

Our team is working hard and fast, but we have high goals. And it seems the pace is never fast enough. But one thing is for certain. Our team is convinced that we will find answers to the many remaining questions about this uncommon, but not rare, condition.

Our SCAD work began because I was inspired and compelled by two SCAD survivors. Our SCAD research continues to be inspired by the compelling stories of SCAD patients and their families and the need to provide them and their health care providers the answers to the many questions that are currently unanswerable.

Answerable

Doctors, like patients, prefer certainty and hard data. I hate that I do not have sufficient science or evidence to provide my patients with more definitive recommendations. We must learn more.

There are still too many unknowns related to a SCAD diagnosis. Why does it happen? Will it happen again? What's my risk? And it's only through research that we'll gain the knowledge we need to care for patients with SCAD.

Although our team's previously published work has been practice changing, there is still so much more we need to learn. Our research participants come from all over the United States and from dozens of countries around the world. We have the world's largest SCAD database and much to learn from.

We invite you to join the Mayo Clinic SCAD Research Program team and our participants, as we continue our efforts to raise awareness of this potentially fatal condition, to advance our understanding of the underlying causes and risks, and to develop solutions for our SCAD patients.