

SPEAKER 1: or spontaneous coronary artery section is a type of heart attack. And it's not due to plaque build up in the arteries. It typically happens in young people, particularly women. We don't really know the cause, although it is associated with certain blood vessel abnormalities, giving birth, extreme exercise or excitement or emotion.

And so, we have a registry set up to study SCAD with over 400 individuals as part of it. We're trying to better understand SCAD so we're looking at lots of things, causes, what medications people were on, taking a deep history. And what we found is a certain percentage of our SCAD patients seem to have a family history.

They related a family member, sometimes a close family member, who had a heart attack at a young age or who had aneurysms. So we dug a little deeper and were able to identify that in fact at least five family pairs had a direct relative who we were able to confirm also had SCAD.

And this is the first time that this familial relationship, and probably a genetic relationship has been identified in this condition. Patients who've been diagnosed with a coronary dissection or SCAD, one of the things they may want to think about in their doctor should be asking them about is family history, just like we ask any other patients who might have a heart attack.

But in this case it might be other family members who had a heart attack when they were young, in their 40s or 50s, or younger, who had no risk factors, never smoked, or a sudden death. And I think then that doctor might be able to better understand or maybe even refer to medical genetics to get a full family pedigree and understand that this is something that runs in the family.

We are also collecting DNA from our SCAD patients and their parents so we can try to better understand with a greater degree of precision by doing whole exome sequencing of these DNA samples and see if there are any gene mutations that are common to one parent or both parents and the SCAD patient.

And that's actually in part how we found some of these individuals as we were talking to family members. They said, oh, my aunt or my sister had a heart attack. Maybe she had SCAD too. It wasn't diagnosed at that time.