

Secondary Stroke Prevention Podcast Series

Episode 1: Secondary Stroke Prevention: Where Are We Now?

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Jorge Saucedo: Welcome to the American Heart Association's Secondary Stroke Prevention Podcast Series. This episode is titled, Secondary Stroke Prevention.

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Jorge Saucedo: Where are we now?

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Jorge Saucedo: This program has been created and directed by a volunteer planning committee, and is made possible by support from Bayer.

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Jorge Saucedo: I am Jorge Saucedo, and I'll be introducing today the discussion. I am a cardiologist by training, and I currently serve as the chair of medicine at the University of Arkansas.

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Jorge Saucedo: for medical sciences, and I am joined by two very esteemed colleagues.

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Jorge Saucedo: Eva Mistry is the Vice Chair and Vascular Neurology Division Director at the University of Cincinnati.

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Jorge Saucedo: Department of Neurology, and an Associate Director of the NIH Stroke Net.

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Jorge Saucedo: And Dr. Shadi Yaghi, who is Professor and Chair of Neurology at Jersey Shore University Medical Center, and a vascular neurologist by background.

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Jorge Saucedo: Welcome to my panelists, and before we get started, it is important to give this disclaimer. The recommendations and opinions presented by faculty today may not represent the official position of the American Heart Association.

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Jorge Saucedo: The materials are for educational purposes only, and do not constitute an endorsement or instruction by the American Heart Association.

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Jorge Saucedo: The American Heart Association does not endorse any product or device.

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Jorge Saucedo: Now, let's get started. Let's get started with our conversation. Eva and Shadi. Just to break the ice, I would be interested to know, in your opinion, what is the most important secondary prevention strategy? Shadi, why don't you start?

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Shadi Yaghi: Thank you so much, Jorge, for the introduction. I wouldn't say there's one most important secondary prevention strategy. Generally, it's a multi-pronged approach. We try to control any factor that could increase the risk of a recurrent stroke.

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Shadi Yaghi: I would say, though, that, you know, when I was in training, the only option for patients with atrial fibrillation was warfarin. So I was so excited when we had studies showing that direct oral anticoagulants are as good as warfarin in terms of stroke prevention, but carried a lower risk of bleeding.

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Shadi Yaghi: You know, patients had problems using Warfarin, with the monitoring, the INR checks, and also, you know, I've seen, and I know, other people also have seen increased risk of intracranial hemorrhage with Warfarin.

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Shadi Yaghi: I'd say the other thing that I was excited about during my fellowship and afterwards was the trials that showed that dual antiplatelet therapy for a short period of time, 21 to 90 days, reduced the risk of recurrence. So, again, showing that optimizing antithrombotic therapy early on after a stroke is important to lower the risk of recurrence.

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Shadi Yaghi: But I am curious to see what Eva thinks is, important.

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Jorge Saucedo: Eva, what do you think?

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Eva A Mistry: Thanks, Shadi, and thanks again, Jorge, for that kind introduction. I agree with Shadi. I think the bottom line of stroke prevention really is drilling down the etiology of the stroke as best we can, and then tailoring those prevention strategies. Shadi has already outlined some great ones, that are some recent advances, novel agents for anticoagulation for atrial fibrillation and dual antiplatelet for minor stroke, or TIA.

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Eva A Mistry: I will add in the spirit of latest and greatest in stroke prevention, first I'll say that it's an ever-evolving field, which is wonderful for us. We're every day finding better ways to prevent strokes in patients who've had a stroke. Also, preventing strokes in patients who have not had a stroke, and one recent advance is asymptomatic carotid stenosis, which is a very common occurrence in general

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Eva A Mistry: population. CREST2 trial, which was published recently, showed that in select group of these asymptomatic carotid patients who have not had a stroke or TIA yet, stenting that carotid may reduce the risk of having an incident stroke, which was a great, you know, path forward for preventing an incident stroke in these patients.

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Eva A Mistry: Also, like Shadi mentioned, reducing risk factors, really generally speaking, for all stroke patients. Life's Essential 8 is what I keep in mind and educate my patients about. For those not so familiar, Life's Essential 8 components include, for cardiovascular health.

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Eva A Mistry: Healthy diet, participating in healthy amount of physical activity, avoiding nicotine.

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Eva A Mistry: having a healthy level of sleep and weight, as well as lipids, blood glucose, and blood pressure, so 8 components. Really just maintaining that healthy lifestyle. I think if we do that, I think we could address

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Eva A Mistry: A major part of preventing secondary strokes in patients who have had a stroke.

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Jorge Saucedo: Well, thank you, thank you, Eva. So, let's... let's really begin the conversation about, and frame the conversation about, you know, why is secondary prevention important?

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Jorge Saucedo: Of course, we know that one of the principal causes of vascular morbidity and mortality stroke

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Jorge Saucedo: And we try to, avoid having a second stroke, but, Shadi, tell us why, why, why is it important?

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Shadi Yaghi: Yeah, that's a great question. You know, I would say the stroke risk is higher in patients who have had a stroke.

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Shadi Yaghi: Statistics tell us that 1 in 4 of ischemic strokes are recurrent strokes, 3 in 4 are first-time strokes, but 25% are recurrent strokes, and people who have had a stroke

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Shadi Yaghi: And we know that after an initial stroke.

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Shadi Yaghi: The recurrent stroke rates are substantial. Particularly in this early period, the 90-day, even up to 1 year after the index stroke, the risk of recurrent stroke is substantial. It's about 6-10% within the first 90 days.

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Shadi Yaghi: and about 15% at 1 year. And this varies depending on the cause of the stroke. Again, going back to what Eva said, important to do a workup and identify the cause of the stroke and make sure it's

targeted. The stroke recurrence risk

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Shadi Yaghi: varies based on the cause of the stroke. Strokes related to small vessel disease, generally, that recurrence risk is about 2-3% per year, it's the lowest.

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Shadi Yaghi: It's about 4-5% per year in cryptogenic stroke. A little bit higher, 8-10%

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Shadi Yaghi: In patients with cardioembolic stroke, and the highest in patients with atherosclerotic stroke subtypes, which is about 10-12% per year.

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Jorge Saucedo: Thank you, Eva, what are your thoughts?

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Eva A Mistry: I think that's a great review of epidemiology of stroke recurrence Shady. I'll say that from a patient and caregiver perspective, it is really important to understand the burden of disability that comes with a recurrent stroke.

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Eva A Mistry: On a population level, an average NIH stroke scale of a stroke patient is around 3 to 4. So these are the strokes, majority of them that occur in the population are not very disabling.

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Eva A Mistry: the first time, the incident stroke. However, when this patient has a second stroke, they generally tend to add quite a bit.

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Eva A Mistry: To the disability that is incurred by the stroke, and then, all the snowball effects from that, adding the cost to the society, lost wages, lost productivity, caregiving burden, and the psychological burden that comes with it, too, is a very important one, and often unmeasured, and sometimes often so not formally discussed in the clinic setting.

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Eva A Mistry: patients carry this fear, frankly, when we see them in the clinic after having the first stroke, you know, that, doc, am I doing everything I can? I don't want to have another stroke, right? That's the number one psychological fear that somebody has after they've had a stroke, because it's such a, scary and life-changing experience, right? Not being able to suddenly move your right arm, or not being able to just suddenly talk

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Eva A Mistry: That is a scary experience, and people are just psychologically, kind of.

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Eva A Mistry: constantly under a kind of a fear of not wanting to have another stroke, so I can't understate that aspect of importance of preventing a second stroke.

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Jorge Saucedo: Thank you. Yeah, what we hear is definitely that the second stroke or third strokes create greater disability, greater risk of patients being

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Jorge Saucedo: hospitalized, long-term care needs also increase. And another thing is there is an increased risk of mortality, two to threefold. I just would like to add one additional thing. As we prevent strokes as a cardiologist, and understanding that stroke survivors are at systemic risk of vascular events, we are also be reducing the risk

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Jorge Saucedo: Of myocardial infarction, vascular death.

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Jorge Saucedo: Cognitive decline and vascular dementia, as, again, as we try to prevent seconds and recurrent strokes.

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Jorge Saucedo: Thank you. So, both of you are neurologists, and both of you take care of patients with strokes, as a cardiologist that don't.

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Jorge Saucedo: Can we... can we... can both of you walk us through the patient, clinical journey from the time the patient presents to the hospital with the stroke until the patient is discharged and... and thereafter?

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Jorge Saucedo: Let's, let's start, Eva, please.

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Eva A Mistry: Definitely. Thanks, Jorge. I think this is a good grounding moment. I would say that every patient's clinical journey is different. From a care pathway standpoint, though, usually stroke patients present to, emergency room, either a kind of a outside hospital or what we call spoke hospital, you know, emergency room.

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Eva A Mistry: At which point they get evaluated by a emergency medicine physician and other clinicians in the ER, plus, ideally a stroke neurologist to make evaluation and recommendations regarding acute treatment. So, if a clot-busting medication or device-based treatments are indicated in that patient.

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Eva A Mistry: If they are, they get either transferred to a main hospital that can provide those types of advanced treatments, or the patient presents there, either scenario.

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Eva A Mistry: Once those decisions are made, and therapies are either delivered based on indication or not delivered, if they're not indicated, these patients get admitted to the hospital, either in the ICU setting or on a regular floor.

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Eva A Mistry: There, a lot of workup begins around their stroke etiology, as we were discussing before. They usually undergo additional brain scans. If they haven't already gotten scans of their blood vessels in the neck and the brain, carotid and the intracranial vessels, they get those scans to evaluate if there's atherosclerotic disease.

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Eva A Mistry: They get evaluation of their heart, both in the form of a telemetry monitoring to evaluate for any arrhythmia, particularly atrial fibrillation that Shadi touched on, as well as an echocardiogram to understand if there's structural heart issues that could indicate an underlying cause of stroke. And then, depending on the patient's age or other comorbid factors, there can be a host of other workup that can be considered for

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00:12:26.510 --> 00:12:49.899

Eva A Mistry: for example, where causes such as underlying cancer and things like that. That all occurs in the hospital, and in parallel, these patients are seen by our physical therapy, occupational therapy, speech therapy colleagues to understand their needs for recovery and rehabilitation, which is a major part of stroke evaluation and management as well.

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Eva A Mistry: And then...

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Eva A Mistry: Throughout the hospitals, say, these things occur in parallel, medications or other treatment prevention strategies get started, depending on the findings of these tests. And then education occurs, hopefully, at a lot of hospitals, right prior to hospital discharge, so that the patients and their families can be equipped with the knowledge of what is to come next.

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Eva A Mistry: Which doctors they're seeing, when they're coming back to see stroke doc in clinic, what form of workup is going to continue outside the hospital, so on and so forth.

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00:13:26.270 --> 00:13:27.390

Jorge Saucedo: Thank you, Shadi.

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00:13:27.790 --> 00:13:45.069

Shadi Yaghi: Yeah, I totally agree with Eva, and I think the last piece, the transitions of care, is very important, because, you know, often patients don't remember a lot of things that happened in the hospital. There's information overload.

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Shadi Yaghi: it is a traumatic event in their life, it's a life-changing event, it's very hard to process it initially. So, a lot of information and things that were discussed in the hospital sometimes are not retained after the

patient leaves the hospital. Sometimes they go home, they have a lot of questions, so that transitions of care is very important.

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Shadi Yaghi: to, you know, make sure that patients come back and see the stroke neurologist, or the neurologist, or their primary care doctor. Sometimes the workup is not completed inpatient. There are certain tests that are done on an outpatient level. So, you know, I would say, like, heart monitoring, for example.

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Shadi Yaghi: sometimes patients need to wear a heart monitor as an outpatient to look for atrial fibrillation, which, you know, finding AFib would change the secondary prevention strategy, so really important to make sure that these transitions of care, the plan is robust, patients are following up. Also, they are monitoring the risk factors.

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Shadi Yaghi: monitoring blood pressure at home or in an outpatient setting to make sure it's under control. And also, sometimes patients are discharged and they need rehabilitation as an outpatient. Some of them go to inpatient rehab, but sometimes they need outpatient or home rehab, so just making sure that these services are set up

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Shadi Yaghi: As soon as possible to help them, go through the recovery journey.

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Jorge Saucedo: Yeah, thank you, and just a word in regards to, you know, what happens when now the patient gets to primary care, right? Now, as chair of medicine here, it's just we take care of patients that have had strokes, and

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Jorge Saucedo: And the points that you stress, I think, are critical, because now we have the interneers, the family medicine doctor, in clinic, seeing patients, and by the time the patients get to clinic, we realize that these transitions of care

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Jorge Saucedo: took place, and often they are not very smooth, and primary care then wonders what is really what the patient medication that he or she needs to be taking because of

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Jorge Saucedo: all these changes, so there is incomplete documentation of the stroke mechanism, of the medications that the patients have taken or need to take. There is also this ambiguous ownership of all-up of care, whether it's going to be more primary care, neurology, who else, right? If the patient had a...

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Jorge Saucedo: cardiobolic etiology, and I pointed out the multiple medications changes, and the medication discrepancies that have been reported in up to 50% of patients at discharge, and also, importantly, I think it is the delayed

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Jorge Saucedo: In outpatient follow-up that commonly, or not infrequently, occurs after 30 days.

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Jorge Saucedo: So the... I think these are also important things that we need to emphasize, and it is difficult for the internist in clinic, or the primary care, really, to continue with this care because of all these...

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00:17:11.710 --> 00:17:28.599

Jorge Saucedo: the fragmentation of care that exists when taking care of patients who have suffered stroke. Let's move on. I'll be interested in... you mentioned, and we've talked about, you know, the different mechanisms of stroke, and I think Eva

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Jorge Saucedo: started mentioning something in regards to diagnostic evaluation, but Chadi, how do you think that we need to... what type of story shall we do for patients who present with stroke?

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Shadi Yaghi: Yeah, that's... that's a very important question. You know, generally, as Eva mentioned, these patients are admitted to the hospital, and they undergo an inpatient

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Shadi Yaghi: diagnostic evaluation. We look at their arteries, the brain arteries and the carotid and vertebral arteries to see if there's any potential atherosclerotic lesion that caused the stroke.

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Shadi Yaghi: We also do an EKG to look for atrial fibrillation. We also do a brain scan, a CT or an MRI. Sometimes the way the stroke appears on the scan can give us some clues about what could have caused the stroke.

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Shadi Yaghi: That could potentially change the treatment. And also, we do an echocardiogram to look for a potential cardiac source, and we monitor these patients on telemetry to look for atrial fibrillation. That generally is the inpatient

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Shadi Yaghi: diagnostic evaluation. As I mentioned, there are some tests that are done on an outpatient setting, like outpatient cardiac monitoring.

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00:18:53.240 --> 00:18:54.919

Jorge Saucedo: Eva, your thoughts?

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Eva A Mistry: I agree totally with Shadi. I think the cornerstone, of secondary stroke prevention is try our best to drill down the etiology of the stroke, because one of the most important aspects of stroke prevention, which is using the appropriate agent and duration of antithrombotic treatment.

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Eva A Mistry: really depends on what the etiology of the stroke is. For example, like Shadi mentioned before, for atrial fibrillation patients that are non-valvular, we want to, optimize them with novel anticoagulant agents because of the advantages it provides over warfarin.

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Eva A Mistry: For valvular atrial fibrillation patients, in consultation with cardiology colleagues, we want to

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Eva A Mistry: pick the right agent. It could be, Warfarin versus DOAC, if indicated. From antiplatelet medication standpoint, which is the cornerstone of treatment currently for, large artery atheros subtype of stroke, as well as small vessel disease subtype of stroke,

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Eva A Mistry: as Shadi mentioned before, for minor strokes and TIA, we want to make sure, that patients are treated with dual antiplatelet agent, in my personal practice, at least for 21 days to reduce the rate... risk of recurrence, in the short term, followed by an appropriate single antiplatelet agent.

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Eva A Mistry: For patients who have intracranial atherosclerotic disease in my current practice.

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Eva A Mistry: It would be dual antiplatelet for 90 days, followed by a single antiplatelet agent. I just want to linger on the intraconar atherosclerotic disease a little bit, because this is such a critical etiology of stroke. We just haven't been able to find a better antithrombotic strategy until now, over the past over three decades.

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Eva A Mistry: to manage these patients, and I know we will talk about some of the novel potential treatments available, including Factor XI, but I think an advance in medical management of atherosclerotic etiology of stroke is sorely, sorely needed. As Saadi also mentioned before, it is the etiology with the highest rate of recurrence of stroke.

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Eva A Mistry: So there's a lot of work to be done in that space, or some work already being done, which is really exciting, that's coming out.

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00:21:15.530 --> 00:21:37.829

Eva A Mistry: And then the last, type of etiology is cryptogenic stroke, a subtype of that is embolic stroke of unknown source, and, we also have a lot of work to be done in that subtype of stroke. We have tested anticoagulation strategy for those patients, respect ESIS, Navigate ESIS trials.

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Eva A Mistry: They have been neutral so far, so we haven't been able to justify anticoagulation in those subtype of stroke patients.

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Eva A Mistry: So really, just bottom line is finding the etiology as best as we can, and then tailoring antithrombotic therapy, keeping up with evidence to provide the latest antithrombotic therapy to these patients is important.

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00:21:58.330 --> 00:22:12.719

Shadi Yaghi: Eva, I completely agree. I just want to add one important point, that identifying the cause and treating, or the potential cause and treating it is important, but I, you know, strongly recommend that people

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Shadi Yaghi: don't focus on one cause and ignore other potential causes of stroke. So treating any factor that could potentially cause a stroke in the future, we know that 25% of strokes are related to a different mechanism than the initial mechanism, and just trying to control any factor that would potentially cause a stroke in the future is very important.

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Shadi Yaghi: And, you know, I think...

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Shadi Yaghi: You both have discussed some of the gaps that we have in secondary prevention, and we know that despite all the approaches that we have discussed, we continue to see a high risk of recurrent stroke, particularly in high-risk patients. So what are the gaps in secondary prevention that you would like to see closed?

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Shadi Yaghi: Jorge, what gaps would you like to be closed?

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Jorge Saucedo: Well, thank you. You know, I strongly believe that, key to secondary prevention, going back to what Eva mentioned earlier, it is, you know, lifestyle changes and the managing of the risk factors. There are data

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Jorge Saucedo: that have shown that strongly managing risk factors can reduce the risk of a second stroke by 80 or 90%. You know, we need to see whether the patient has diabetes or not, keep the hemoglobin A1C to less than

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00:23:42.480 --> 00:23:48.520

Jorge Saucedo: 7. Hypertension is possibly the most important intervention for secondary prevention.

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Jorge Saucedo: An office blood pressure of 130 over 80, less than it should be our goal.

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Jorge Saucedo: LDL cholesterol, less than 70, with high dose statin, atorvastatin 80, or so, and adding other medications to bring that cholesterol to lower levels. Regular physical activity...

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00:24:20.290 --> 00:24:27.230

Jorge Saucedo: Obviously, discontinuing smoking, the patient was a smoker. The Mediterranean

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00:24:27.510 --> 00:24:32.880

Jorge Saucedo: Diet has also been associated with a reduced risk of,

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00:24:32.880 --> 00:24:55.420

Jorge Saucedo: second stroke. So I think these things are critical, but I also want to, as I had mentioned these transitions of care, to talk about the issue of medication adherence. I don't think we've talked much about it, but patients do discontinue medications, and those that discontinue medications are at the higher risk

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Jorge Saucedo: of developing stroke. It's been reported that as many as 20 to 40% of patients

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Jorge Saucedo: discontinue at least one preventive medication. Contributors to that are, of course, the side effects of the medication, cost, poor understanding of recurrent risk.

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Jorge Saucedo: polypharmacy, so, I think we need to be working on that. And I think we need to emphasize also the role that the social determinants

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00:25:27.150 --> 00:25:31.810

Jorge Saucedo: Of, health play into,

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Jorge Saucedo: stroke and second strokes. Black and Hispanic patients experience higher stroke incidents, higher recurrences, more functional outcomes. Also, patients in rural or underserved areas that have less access to neurologists.

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00:25:49.570 --> 00:26:06.919

Jorge Saucedo: and stroke specialist may fear worse outcomes. So all of these things, I think, are important, but if we want to prevent strokes, I think the bigger impact that we can have is by really controlling risk factors.

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00:26:08.420 --> 00:26:12.369

Shadi Yaghi: Thank you. Definitely very important points. Eva, what do you think?

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00:26:12.580 --> 00:26:18.579

Eva A Mistry: I think Jorge covered it really well. What he's essentially telling us is

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00:26:19.440 --> 00:26:24.050

Eva A Mistry: Following, the recommendations they currently stand, and

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Eva A Mistry: Ensure that we reduce burdens to access off the medications that already exist and are approved for risk factor control and stroke prevention. If we can do that, I think that a lot of battle about stroke prevention will be won.

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00:26:40.420 --> 00:27:05.320

Eva A Mistry: I want to address the cost of stroke prevention strategies a little bit. I think social determinant of health. A lot of these things are such a complex interplay in terms of who and why they're able to access these medications, and cost plays an important role in adherence. We have great medications, including newer ones. We have PCSK9 inhibitors for those patients that are non-responders or have

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Eva A Mistry: side effects through statins. We have newer antihypertensives.

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Eva A Mistry: medications for diabetes, GLP-1s, but who's able to access these medications, especially from a cost standpoint, is an important consideration. And then the other cost consideration I want to add, and we haven't touched on procedural stroke prevention much today, but examples include PFO closure, stenting access.

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Eva A Mistry: things like that. These procedures are also expensive and insurance-based and not easily accessible for underinsured patients. And so costing is an important factor, and I think whatever we can do to reduce that barrier is important to consider.

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00:27:50.500 --> 00:28:00.880

Shadi Yaghi: Yeah, these are all great points. I'll just add one thing that, you know, I often encounter in practice when I see patients back... come back to the office.

124

00:28:00.880 --> 00:28:16.520

Shadi Yaghi: They stopped their antithrombotic treatment because of bleeding. It's not uncommon that the antithrombotic treatment, while they have been shown to lower the risk of stroke, they increase the risk of bleeding. So I think a big gap is

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00:28:16.520 --> 00:28:23.530

Shadi Yaghi: you know, finding an antithrombotic medication that lowers the risk of stroke, but does not

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00:28:23.530 --> 00:28:44.100

Shadi Yaghi: increase the risk of bleeding. Also, another gap is completing the diagnostic evaluation. Often, patients require a cardiac monitor as an outpatient, and studies have shown that, you know, very... a small percentage of patients actually undergoes cardiac monitoring as an outpatient.

127

00:28:44.100 --> 00:28:51.480

Shadi Yaghi: Now, let me ask you this question. If you have one wish for secondary prevention, what would that be?

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00:28:53.330 --> 00:29:18.049

Eva A Mistry: I guess I'll go first. I have a wish list, Shadi, but if you ask me to pick one, I think hypertension control. I think that is the crux of both incident stroke as well as secondary stroke prevention, both ischemic and hemorrhagic, right? So, I think if we just do one thing, which is control blood pressure at a population level, I think we will have been

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00:29:18.050 --> 00:29:19.709

Eva A Mistry: Win a big part of the battle.

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00:29:20.230 --> 00:29:21.380

Shadi Yaghi: And Jorge?

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00:29:21.740 --> 00:29:40.969

Jorge Saucedo: When it comes to secondary prevention, I believe that the problem is not lack of evidence. We have a lot of good science, but I think it is lack of implementation of the science that we already know, of the guidelines that have been published.

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00:29:41.210 --> 00:29:52.089

Jorge Saucedo: So, I... for me, it would be to be able to apply our guidelines broadly to our different populations.

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00:29:53.250 --> 00:30:08.590

Shadi Yaghi: That's great. Those are very important as well. And I know there are several trials in the pipeline. Some of them will be presented at the next International Stroke Conference. What are you most excited about?

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00:30:09.810 --> 00:30:21.549

Jorge Saucedo: Well, I will leave some of the new antithrombotic agents to both of you, vascular neurologists, but, you know, GLP-1s.

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00:30:21.650 --> 00:30:28.370

Jorge Saucedo: I think are exciting drugs that, have shown to possibly have

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00:30:28.370 --> 00:30:42.090

Jorge Saucedo: an impact in, stroke prevention, as we are able to manage better risk factors. Obviously, managing cholesterol very aggressively with medications that already exist.

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00:30:42.200 --> 00:30:57.690

Jorge Saucedo: like PCSK9s, for instance, are two of the types of medications that I think will be more readily used in managing patients who have suffered stroke.

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00:30:59.500 --> 00:31:01.529

Shadi Yaghi: Great. Eva, what are you excited about?

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00:31:01.530 --> 00:31:26.359

Eva A Mistry: I'll touch a little bit about Factor XI inhibitors. I'm particularly excited about it. The results of the Oceanic trial, which looked at asondexion, which is a factor XI inhibitor for secondary stroke prevention, non-cardioembolic specifically, the results are going to be presented in full at the International Stroke Conference. We already saw the

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00:31:26.360 --> 00:31:51.319

Eva A Mistry: the baseline characteristics data at World Stroke, and then the announcement, from the company about the positive results. And I'm super excited that secondary stroke prevention is the first, indication for, potentially, I hope, for, for 11A inhibitors. So I'm particularly excited about it. Exciting that a lot of atherosclerotic

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00:31:51.320 --> 00:32:15.449

Eva A Mistry: large artery athero, etiology of strokes were included in this trial. As we have mentioned several times, this is the one that needs a lot of addressing in terms of gaps. And the other population that was enrolled in this trial was, ESA stroke patients, embolic stroke of, unknown source, and both of these just haven't had that win so far, and so I am

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00:32:15.450 --> 00:32:39.809

Eva A Mistry: particularly excited of having, finally, a new treatment, to offer to reduce the risk of stroke in these patients. And Shadi, what you said earlier is balancing the risk of bleeding, which is one of the benefits of the 11A inhibitors, in addition to its efficacy from, affecting dual pathway for antithrombotic effects. So, I'm excited to hear the results at the ISC.

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00:32:40.530 --> 00:32:45.849

Shadi Yaghi: Yeah, I am as well, and I'll be eagerly waiting to see what the trial showed.

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00:32:46.100 --> 00:32:51.150

Jorge Saucedo: So what are your thoughts, Shadi, in terms of, you know, the data that excites you most?

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00:32:51.280 --> 00:33:03.680

Shadi Yaghi: Yeah, for me, I'm, you know, I know I'm excited about non-cardioembolic stroke prevention, but also patients with cardioembolic stroke also have a higher, risk of recurrence.

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00:33:03.680 --> 00:33:12.529

Shadi Yaghi: And I'm excited about a dual approach to these patients, trying left atrial appendage occlusion plus

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00:33:12.530 --> 00:33:36.440

Shadi Yaghi: direct oral anticoagulant compared to direct oral anticoagulant. There's an ongoing trial that I am very eager to wait to see what it showed, because, you know, there has been some challenges in the patients who have atrial fibrillation. You know, DOACs do carry a risk of bleeding. They don't work 100% of the time.

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00:33:36.470 --> 00:33:45.039

Shadi Yaghi: So, you know, there are high-risk patients who could potentially benefit from a dual approach, and I'm really excited about the ongoing trials.

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00:33:46.410 --> 00:34:08.419

Jorge Saucedo: Well, this is... this is wonderful, great conversation. I want to thank Dr. Mistry and Dr. Yaghi again for joining us in this podcast. As a reminder, this is the first episode as part of the American Heart Association Secondary Stroke Prevention Podcast Series.

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00:34:08.500 --> 00:34:17.030

Jorge Saucedo: More episodes can be found at learn.heart.org. Thank you very much. Thank you, Eva. Thank you, Shadi.

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00:34:17.409 --> 00:34:17.929

Eva A Mistry: Thank you.

152

00:34:17.929 --> 00:34:18.739

Shadi Yaghi: Thank you.