CHET RIHAL: Greetings, I'm Chet Rihal. Today, I'm joined by Dr. Stephen Kopecky. He's Professor of Medicine and consultant in Preventive Cardiology here at Mayo Clinic.

Steve is also the current president for the Society for Preventive Cardiology here in the United States. Steve and I are going to be discussing erectile dysfunction and its impact on cardiovascular prognosis and diagnosis. Steve, welcome.

STEPHEN KOPECKY: Thank you, Chet.

CHET RIHAL: Steve, there's been a lot in the literature and in the lay media about erectile dysfunction. Of what importance is that to a cardiovascular specialist? And, in particular, I'm referencing the metanalysis that you published a couple of years ago.

STEPHEN KOPECKY: Yes, thanks Chet. Erectile dysfunction is one of these things we haven't really talked about much in the cardiology office. But we're finding that it is a harbinger of coronary artery disease. For instance, if you're a 70-year-old man and you have erectile dysfunction, your risk is increased-- maybe 1 to 1.4 times is your risk for coronary disease. But if you're a 40-year-old man and have erectile dysfunction, your risk for coronary disease is 40 to 50 times higher.

CHET RIHAL: Steve, just so I'm hearing you correctly, you said that for a younger patient in their 40s with erectile dysfunction portends a risk 40 to 50 times higher than usual for coronary disease.

STEPHEN KOPECKY: Correct, for another man just like him.

CHET RIHAL: Yeah.

STEPHEN KOPECKY: So it's really a symptom that comes up that we tend to brush under the rug sometimes and laugh about. But really we need to tell our patients and ourselves and our referring doctors and say this is a time we can really do something for the patient to help them-- not just their erectile dysfunction but also their heart.

CHET RIHAL: So, Steve, what should we be doing in the office then when patients tell us about this history? What's the next step?

STEPHEN KOPECKY: Well, I think when we hear about it that we need to act on it and look at their cardiovascular risk factors. Why? Because the risk factors for erectile dysfunction and for coronary disease are basically exactly the same-- diabetes, overweight, lack of exercise, poor diet, hypertension, et cetera. So we need to start working on those risk factors.

And what I've found is when I talk to a patient about their risk for heart disease they say, OK, yeah, where's my stent and my statin. But when I talk about erectile dysfunction, they perk up-- they start to listen-- they say, gee, what do I need to do doctor.

CHET RIHAL: So what do you do then in the next step of your evaluation. Do you go immediately to aggressive secondary treatments or are there other things that we should be doing?

STEPHEN KOPECKY: Well, the first thing is look at how long they've had erectile dysfunction. Erectile dysfunction seems to precede coronary disease by about three to five years, which is a nice thing to know. Because if you have a patient whose had ED for a year or two, we say, wow, we need to start doing something before you really have a manifestation of coronary disease.

And they start to listen to that, and we can do stress tests. We can look at them, certainly be very aggressive with their risk factors. And I think that's the key thing is to start talking to them about lifestyle and risk factors.

Now you mentioned our article we published earlier. We found that if you work on your coronary disease risk factors, we said what effect does that have on erectile dysfunction. And within about two years, we've found that it's equivalent to taking 25 milligrams of Viagra, in terms of it improves--

CHET RIHAL: That's amazing.

STEPHEN KOPECKY: --your erectile function--

CHET RIHAL: Yeah

STEPHEN KOPECKY: --if you lose some weight, get your risk factors under control.

CHET RIHAL: Well that's really remarkable, Steve. Now what about the medications that are used to treat ED. Are there cardiovascular complications that we need to be aware of, maybe paying more specific attention to?

STEPHEN KOPECKY: Yes. Well, clearly the drugs that we use can affect things like hypertrophic cardiomyopathy. They can increase afterload-- or the afterload-- the obstruction can increase--

CHET RIHAL: Mm-hmm.

STEPHEN KOPECKY: --and cause symptomatic--

CHET RIHAL: Mm-hmm.

--problems, like vasovagal or--

CHET RIHAL: Mm-hmm.

--lightheadedness

CHET RIHAL: Mm-hmm.

--or actually syncope, especially after sex.

CHET RIHAL: Mhm. And, of course, the interaction with nitrates is well known.

STEPHEN KOPECKY: Yes, we have to be very careful with nitrates and not give them 24 hours before or after or vise versa the drugs we use for ED.

CHET RIHAL: Steve, how often in your practice have you noticed that there are vascular causes for ED that can be treated endovascularly? Have you come across that in your practice?

STEPHEN KOPECKY: Well, that is interesting in this part of the hypothesis. Why does ED-- why is that a bellwether for coronary disease? The penile arteries are 1 to 2 millimeters. The coronary arteries, as you know well, are 3 to 4 millimeters So maybe it's starting to show up a little bit earlier.

And there is some data showing that some folks have used some drug-eluting stents to start to treat some of the smaller arteries that cause erectile dysfunction with good results.

CHET RIHAL: Interesting. Steve, so to summarize, what would be the top or three messages that you'd like to deliver to the cardiology community regarding ED?

STEPHEN KOPECKY: Yeah, first is that, if you hear of ED, it raises your patient's risk for coronary disease no matter what the patient is. It's an increased risk factor, especially the younger they are the more it increases their risk. And it's really helpful in the intermediate-risk patients.

The ones who have a lot of disease, we don't really need to know much more about them. But the intermediate risk, I'll always ask them do you have any erectile dysfunction maybe early on. And if they do, then I'm much more aggressive.

The second thing is I think it's important to talk to the patients about it and say this is an artery problem-- it's a blood flow problem-- this is in a smaller artery starting to occur earlier than the heart arteries, so we really need to work on it now-- let's not wait till later. And patients aren't that concerned about heart attacks sometimes, but they're very concerned about ED, so they tend to pay attention.

And, also, with spouses-- I saw a patient the other day and he said I had some discomfort when I was raking leaves and I stopped and his wife said, honey, I was raking leaves with you-- you didn't tell me that's why you stopped. But it's very hard for the husband to hide from the spouse the ED. And take that as a teachable moment, so to speak, to say let's do something for not only for you're ED but also for your heart and let's see the doctor.

CHET RIHAL: So you incorporate it as part of your routine history taking--

STEPHEN KOPECKY: Routine for every patient.

CHET RIHAL: --for every cardiac patient, right?

STEPHEN KOPECKY: Every patient.

CHET RIHAL: Yeah, and then you use that as a motivational thing for the patient's risk factors as well as a diagnostic prompt as well.

STEPHEN KOPECKY: Correct. It's a risk stratifier.

CHET RIHAL: Terrific. My guest today has been Dr. Steve Kopecky. This conversation has been very enlightening, and I hope you have found it as useful as I have. I'd like to thank you for your attention and invite you to continue to watch more Mayo Clinic videos on theheart.org. Thank you.