ERIK S. STROES:

So let's focus at some of the patients we get referred by our colleagues at the cardiology department. For instance, there is a 63-year-old lady, and she had a PCI. She had multivessel disease. And she tried statins, and she eventually was on rosuvastatin, 5 milligrams. But as soon as you tried a higher dose or when you switched to atorvastatin she actually complained of muscle aches, and she discontinued the drug.

And the cardiologist was not satisfied with the residual value, because residual value was still 105 milligram per deciliter. And the cardiologist was in doubt-- what shall I do in this case? It's a woman, but there was multivessel disease, so how to interpret this?

When we saw this lady, actually the first thing is, was everything really tried? So what we do is we look at what statins have been tried and what the complaints were and how the temporal relation between the complaints of the muscles and the intake of the medication is. Did she ever discontinue the statin and did the muscle complaint disappear?

Now, let's suppose that all that was positive. If she discontinued the statin, the muscle aches disappeared. What we then do, we go to the third statin. We go to the slow release statin, where there's been some very convincing publications that maybe the slow release combined with ezetimibe may give you sufficient reduction.

Now unfortunately, that also failed in this lady. And it was quite severe, because she really was hampered in her daily activities. So in that case, we switch to PCSK9 plus ezetimibe. Why? Because there is very convincing evidence that if you look at the number needed to treat for someone with multivessel disease, and you establish a 60% reduction on LDL by PSCK9, add it with ezetimibe, which gives you another 15%, you can most likely achieve levels way below 70 milligram per deciliter.

And we know that the number needed to treat estimated for such a patient with multivessel disease is actually around 1 in 25, which a very decent achievement, and you can significantly lower the risk for these patients. So don't accept high values in high risk patients, which are defined as multivessel disease or diabetes or you name your high risk indication.

Let's go for another patient. Let's, for instance, see patients we get referred with, well, a little bit of uncomfortable feeling in the legs when they walk for more than 15 minutes, but nothing strange. 67-year-old, so maybe it was age. And actually they were referred, because they tried simvastatin 40. But simvastatin 40 also, well, he stopped taking, because he wasn't really convinced, and he read a lot of newspapers which taught him that maybe simvastatin was wrong.

So when we evaluated this patient, we saw, for one, during ankle-brachial index that he had an ankle breakaway index of 0.8, actually showing that there's symptomatic peripheral artery disease. So how severe is that? Well, the data show that if you have peripheral artery disease, your five-year prognosis of surviving is actually worse than having breast carcinoma.

So if you look at the peripheral artery disease and you make a CT of your coronaries, you will find that more than 65% of these peripheral artery disease with an ankle-brachial index below 0.9, more than 65% have significant atheroma burden with elevated calcium scores in coronary arteries. So actually, these patients qualify as polyvascular disease, multi-level vascular disease with quite significant risk.

So what do we do with this patient? Well, for one, we counsel and we explain thoroughly that his risk is not his legs going tired. His risk is dying from a myocardial infarction, of getting a myocardial infarction. And there we actually not primarily choose for the PCSK9s, but we intensify statin therapy. So we started with atorvastatin 740 combined with ezetimibe 10, and then see how low he goes.

And actually, this patient, when he understood the indication and the high risk situation he was at actually quite well-tolerated combination atorvastatin and ezetimibe 10. And he achieved an LDL of less than 60 milligram per deciliter with this medication. So that implies tailor therapy, but for one, recognize the high risk. And then don't be satisfied with a meager result, either through non-tolerance or through the wrong medication with the wrong motivation and low adherence.