Scott Shurmur, M.D.

How can smoking lead to heart disease and stroke?

0:06

Several ways, many of the chemicals of which there are 7000 or something in tobacco smoke contribute to the buildup of blockages called atherosclerosis in arteries in the neck and the brain and the arteries that supply the heart. And those plaque build ups can rupture. It's the rupture of those plaques, that often results in a heart attack and sometimes a stroke. In addition, when those plaques rupture, blood clots begin to form on top of those and small components of the blood called platelets are meant to heal wounds in arteries and veins if they occur, but in this case, when those plaques rupture the platelets on top of those ruptured plaques can form clots and if the clots become too big and too complete and there's no blood flow at all in the artery, and a heart attack can ensue and smoking makes those platelets stickier and more likely to aggregate to stick together and form bigger clots so it could increase the likelihood of our heart attack occurring should a plaque rupture in the first place.

Are there immediate benefits to quitting smoking?

1:30

Yeah, there is good news on the smoking cessation front. It's classically taught that if you stop smoking then it takes about seven years for your lung cancer risk to be identical to that of someone who never smoked and it's higher for many of those years and then it gradually drops in the case of a heart attack your risk of having a heart attack drops virtually the day you stop smoking because the influence of the chemicals on a plaque rupturing and on the platelets in terms of their stickiness goes away immediately when you're no longer exposed to the tobacco and the smoke.