

Hypertension in Women  
Webcast  
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Dr. Renee Scola

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**Andrew:**

This is Andrew Schorr once again on HealthNet on nmh.org with our every two-week Patient Power programs. And we've been doing some wonderful ones where I've been learning a lot. And just a couple weeks ago we did a whole program on stroke. But, you know, one of the things that can lead to stroke is hypertension or high blood pressure. And we wanted to take a little time today to speak about hypertension particularly in women.

And so joining us is an internal medicine specialist, Dr. Renee Scola. She is with the Chicago Lakeshore Medical Associates and she is right across the street from Northwestern Memorial Hospital. Dr. Scola thanks for being with us.

**Dr. Scola:**

Thank you, Andrew.

**Andrew:**

So when we talk about hypertension in women, women and high blood pressure, is it a problem these days?

**Dr. Scola:**

Yes. And I would really like to emphasize that hypertension in women is one of the most common medical problems. Hypertension in general affects 70 million people in the United States, and up to one-half of those are women. So it's a really prevalent problem these days.

**Andrew:**

Now, are women aware of it?

**Dr. Scola:**

Thirty percent of women are completely unaware that they even have hypertension.

**Andrew:**

Wow. Wow. Now, what does hypertension mean? We see the blood pressure cuffs in the pharmacy. What are the numbers and what are those numbers measuring?

**Dr. Scola:**

Yeah. So blood pressure in general, that's the force of blood as it's moving through blood vessels. And if the blood cannot flow as easily through those vessels, then

the force is going to increase. And if this force becomes too great then you have what we call high blood pressure.

Now, there are two components of a blood pressure reading. The upper number is called the systolic blood pressure, and that's the number that's measured when the blood is pumping through the arteries, when the heart is pumping. The lower number is called diastolic blood pressure, and that's in between beats when the heart is resting.

I would like everybody's blood pressure to be lower than 120 over 80. But certainly if your blood pressure is getting higher than 140 over 90, then that's considered hypertension.

**Andrew:**

Okay. Now, are there some people who are particularly at risk? Like does it run in families or certain times of life or even certain ethnic groups?

**Dr. Scola:**

Right. So there are people that are definitely at risk for high blood pressure. For example, the older you get the more common blood pressure becomes, and up to half of women over 60 have hypertension. So it is pretty common in women over age 50 and definitely over age 60. We think some of that could be related to the menopausal change although we don't really know the exact relationship.

Another risk factor would be a family history. So blood pressure does tend to run in families. And so if you have a family history of high blood pressure you should make sure that you're getting your blood pressure checked regularly by your physician.

The other ethnic group where high blood pressure is common is African Americans. They definitely have a higher incidence of high blood pressure.

**Andrew:**

Do we have any idea why?

**Dr. Scola:**

We don't seem to know why. We do see in African Americans that it tends to occur earlier in life and it can be more severe and harder to control.

**Andrew:**

Now, what about certain times of your life? Pregnancy, taking birth control pills, does any of that affect that and anything you should do?

**Dr. Scola:**

Right. So for women in general you should know when you're at risk for developing

high blood pressure. And one of those times as a young woman may be while you're taking oral contraceptives or birth control pills. We do see a rise in blood pressure in some people with birth control pills, so you should make sure that if you're taking them, one, you get your blood pressure checked prior to starting the birth control pills and periodically thereafter at your yearly physicals.

The other time would be during pregnancy. We think that high blood pressure can affect up to 6 to 8 percent of pregnancies, and it can affect it in different ways. Some people may have high blood pressure going into pregnancy, and we need to control that throughout the pregnancy. Another aspect of it may be high blood pressure that developed during pregnancy called gestational hypertension, and that may have to be monitored by a physician, and somebody may need to be on medications. And there are special medications that we select only when women are pregnant.

And then there is another type of high blood pressure in pregnancy called preeclampsia, and that's more of an acute onset, usually near the latter half of pregnancy.

**Andrew:**

Okay. So it's something to be aware of. Now, what's the risk? Why do we have to worry about high blood pressure?

**Dr. Scola:**

We need to worry about high blood pressure because, one, it's the major risk factor for the number one and number three leading causes of death. And one would be heart disease or heart attack and number three would be stroke. And it's a major risk factor for both of those things, and so that's why it's very important.

In addition, high blood pressure can cause kidney disease and it can cause disease in the eyes and can even lead to blindness in some people. So it's very important.

**Andrew:**

Previously on our programs we've done some interviews with the experts at Northwestern memorial, for instance in kidney transplant, but what may have been happening in some cases--certainly some people have had diabetes and other issues, kidney disease--but it could have been a chronic hypertension over many years that led to their kidney failure, correct?

**Dr. Scola:**

Exactly. Exactly. Oh, I know one thing, Andrew that we talked about, kind of uncontrollable risk factors. There are some controllable ones that maybe we should mention about weight and alcohol.

**Andrew:**

Absolutely. Well, I was going to ask about that. First of all we have a weight epidemic, an obesity epidemic in American. And many women, I think it's about 50 percent of American women now would be said to be overweight. How does that tie into a risk for hypertension?

**Dr. Scola:**

Yes. So we do know that people who have a body mass index who are considered obese, and that would be a body mass index of greater than 30, are at higher risk to develop high blood pressure. And also in general people who have a body mass index of 25 to 29, which are considered in the overweight category, they also do have somewhat of an increased risk too.

**Andrew:**

Okay. So we mentioned about that. Now what about use of alcohol or any products, does that affect you? Or coffee even?

**Dr. Scola:**

Right. So people that use alcohol heavily can have an increase in their blood pressure. Caffeine. What we've found with caffeine is people do have a transient increase in blood pressure. We're not really sure if that's actually relating to increased blood pressure over time. So it's not considered a direct risk factor for high blood pressure, but you can have a transient increase after having a cup or coffee or two. So we would recommend caffeine in moderation.

**Andrew:**

All right. So you're at risk for stroke. You're at risk for heart attack. Now, is another risk heart failure?

**Dr. Scola:**

Exactly. Because high blood pressure over time can increase what we call the left ventricle, which is the main pumping muscle of the heart. And as that heart is trying to push against a high resistance in the blood vessels that muscle gets thicker and thicker and thicker. And as that muscle gets too thick it can stretch the heart out and prevent it from pumping as well. And that can lead to heart failure.

**Andrew:**

Dr. Scola, when we think of like a family connection, women are used to wondering about breast cancer in their family and so they say what did mom have or grandmom or Aunt Susie. When you talk about a family history of hypertension does it matter whether the relative was male or female?

**Dr. Scola:**

No, it doesn't necessarily matter whether the relative is male or female. So any family history of high blood pressure can predispose someone to high blood

pressure. And if you have multiple family members we do consider you at a higher risk.

**Andrew:**

Okay. So we have someone who's at high risk. Does that mean you monitor them more carefully? Do you start medications earlier? Do they need a controlled diet? What do you do?

**Dr. Scola:**

So there are categories for blood pressure levels in adults. And as I was saying earlier normal would be considered less than 120 over 80. There is a prehypertension stage and those numbers are 120 to 139 over 80 to 89. And in that category we like to monitor people and check their blood pressure periodically and encourage them to exercise regularly, to follow a low-salt diet, to try to lose a little bit of weight if they could, cut down their alcohol a little bit. So they're considered the prehypertension stage.

Now, the hypertension stage would be 140 over 90 or greater. So stage I is 140 over 159 over 90 to 99, and stage II hypertension would be greater than 160 over 100.

**Andrew:**

When we talk about prehypertension we're probably talking about millions of people in this country, don't you think?

**Dr. Scola:**

Exactly. Right.

**Andrew:**

That's what we worry about. These are the people who would otherwise wind up in the hospital or have some catastrophic event. But we want to prevent it. So people try, okay. They say I'm going to take salt out of my diet. I'm going to try to walk, you know. And I'm going to change some of my habits. Now, one of the things I wonder is does smoking matter related to hypertension?

**Dr. Scola:**

So smoking too we think has a transient increase in blood pressure, again maybe after a cigarette, but it's really unclear whether that's raising your blood pressure over periods of time. So we don't call that necessarily a direct risk factor although we do encourage people to quit smoking.

**Andrew:**

Right. And it's certainly not good for heart disease or cancer for sure too.

**Dr. Scola:**

Exactly. Right.

**Andrew:**

So, Dr. Scola, so people try to make changes. How do you monitor that and decide whether or not medication is needed?

**Dr. Scola:**

So again I do encourage people to lose weight and exercise. And if it doesn't seem like they're achieving enough of a reduction in their blood pressure with that then we do consider medications.

Now, let me take a step back and say that, you know, in somebody that we're monitoring their blood pressure closely we may do laboratory tests. We may check their blood counts and their electrolytes and their kidney function. We may collect a urine sample and look for protein in the urine. We may do what's called an EKG to take a look at the heart or a stress test. Or in certain people we even look at certain hormone levels to see if there is any explanation why this is occurring.

Now in 95 percent of people we really can't find an identifiable cause. So again usually we start with lifestyle modifications, and if that doesn't work then we go to medications.

**Andrew:**

Okay. Now let's talk about medications. So there are many blood pressure medications, older ones, newer ones, some you take more often, some you take less. The costs vary greatly. So help us understand the range of blood pressure medications and the thought process you go through as a physician with individuals to decide where to start, and also is where you start necessarily where you end up.

**Dr. Scola:**

Right. So it is a bit of a process. And I will say that I take a look at what other medical problems that particular individual might have and also being male or female and in addition to what other medications they may be taking and also if they're of child-bearing age. And I can give you some examples. For example, if somebody has asthma we wouldn't want to give them a certain class of medications called beta blockers because those aren't good for people that are asthmatic. In addition, now, if somebody was pregnant we do give them beta blockers. Not if they're asthmatic, but if it's a pregnant woman because that's one class of medications that is shown to be very good for pregnant women with high blood pressure.

I will say one class of medications that is generally first line and if people don't have a reason not to take it we like to give them diuretics, mainly the thiazide diuretics. And that's what people would call a water pill. People do urinate a little

bit more initially when they take it, but we do find it has a low incidence of side effects and we tend to get a little bit of water loss from it which does help us to bring the blood pressure down to a nice level.

Now, there are many other classes of medications. Calcium channel blockers, ACE inhibitors, angiotensin receptor blockers. And the particular classes ACE inhibitors and angiotensin receptor blockers might be good for a patient that also has diabetes. So again I look at what other medical problems the individual has, how old they are, if they are of child-bearing age, and we go from there.

But it is a process. A lot of times the first medication is not right for somebody or we don't achieve goal with the first medication or the first dose, or sometimes we even need multiple medications. So people have to be patient.

**Andrew:**

Dr. Scola, you start someone on a medicine that you think is right for them and then how do you monitor to see if this is the right medicine?

**Dr. Scola:**

Initially I have to see the patient back pretty frequently. So depending on how high the blood pressure is and what medication we're using, I would see the patient back in no more than a month. Now, sometimes it's two weeks, depending on how high the blood pressure is.

I do encourage people to check their blood pressure outside of the office. Some physicians practice this and some don't. I will say it works for some patients and some patients, it doesn't work. I think it's nice to have a combination of the patient's readings outside of the office and my readings inside the office, and then we can see if they're comparable. And I think that gives us a broader range of readings and more readings to take a look at.

Usually, when I start people on a medication by one month into the medication we check some blood work again to see if there's any changes in their kidney function or any changes in their electrolytes, which can sometimes be side effects from the medication they're put on. And then usually I see patients at one-month intervals until we get the blood pressure controlled, and then after that I see them every three months.

**Andrew:**

Now, if you want to manage someone's expectations, obviously if they're told they have high blood pressure and there are all these terrible things that can happen, they want to see change. What would be expectations of how quickly the lifestyle changes they're making and the medication could make a different?

**Dr. Scola:**

So it can make a difference as far as reducing risk definitely of stroke pretty quickly. It also can reduce risk of heart disease too. That may take a little bit longer and more of a stabilization over time of blood pressure, but again most of this does really happen overnight. So I think patients just really have to be patient and come to their visits regularly. I think just establishing that they have high blood pressure and being put on one medicine and then if they don't come back for a year, that's not really enough. I think they really need to come in regularly and have things monitored.

The other aspect would be to look at what their weight is doing, which I know we've mentioned earlier. Now, if somebody is trying to lose weight with the goal of reducing their blood pressure then that process can take a long time. So it's variable patient to patient.

**Andrew:**

Now, related to medications, you know, I like to say there's no free lunch with powerful medicines. They often have different side effects.

**Dr. Scola:**

Right.

**Andrew:**

Some have side effects for some people and don't in others. Some have stronger side effects than others or different ones. So since you have such a wide choice of blood pressure medicines it would seem like that dialogue between the patient and you, How are you feeling, are you noticing any differences? Not just in the blood pressure but in other aspects. So what would be some side effects to look for and what are the options to change to one of those other medications you have?

**Dr. Scola:**

Right. So with the diuretic medications, as I was saying earlier, patients do urinate a little bit more. Some patients like that, and other patients feel that it's a problem depending on if they may drive long distances, or what they do for work or if the patient already has an overactive bladder and then they're urinating more and may not like those side effects and that may not work for them. So that would be one side effects of the diuretics.

In addition that medicine, although we tend to choose what is called potassium-sparing diuretics where patients don't lose as much potassium, it does still have the potential for potassium loss. So that is one thing that is a potential side effect, although patients may not necessarily feel anything unless their potassium got too low. Some of those patients I encourage them to have a banana, but of course I would advise individual patients to check with their own doctor before doing so.

With the beta blocker class of medications it does lower pulse. In addition the calcium channel blocker class of medications also does lower pulse. And patients may feel a little bit weaker if their pulse gets too low. So I always tell patients that they should let me know if they feel more fatigued or if they feel dizzy with the medications. That's something that they would want to let me know right away.

Now, with the ace inhibitor class of medications a potential side effects is cough, because it does release a chemical that can cause cough to occur, something called bradykinin. A lot of times I don't start patients on that initially unless they're diabetic, for which that's a very good class of medications, or unless we've tried some other classes and they don't seem to be working out. So but that's a potential side effect of that class.

So every medication can have potential side effects. I do think there are so many different medications to choose from that, you know, it is certainly very possible for patients and physicians and the whole health care team to work together to find something that's right for each patient. Because I think that a patient shouldn't try one medicine and then get frustrated and leave their high blood pressure untreated.

**Andrew:**

Right. I was just going to say that the alternative of going untreated should you need medicine is not a good one because you're at so much risk, and the price you could pay, either with death or disability, is too high.

**Dr. Scola:**

Right.

**Andrew:**

Well, okay. Let's get back to women now. You know, women are so good about looking out for other members of the family. Their parents, often, you know, the adult woman is often the person who is making arrangements, making sure mom or dad are okay, their spouse, their child, their best friend. But often they don't think about themselves or aren't on top of it as much.

**Dr. Scola:**

Exactly.

**Andrew:**

So I know you told me 90 percent of your practice is women and so you probably have a little speech you make to tell people to make sure you're number one when it comes to certainly this risk of terrible things, stroke, heart attack and heart failure, that when it comes to blood pressure you've got to be on top of it and make sure that you're taking care of yourself.

**Dr. Scola:**

Right. And I really do try to encourage women to take care of themselves because, you know, again they may spend a lot of time taking care of their children or their spouse. But I try to encourage them because they want to be there for their children or their spouse and by taking care of this problem we know that it can extend your life because it can decrease, again, your risk of the number one and number three killer. We try to emphasize that to patients. And I do have a speech we go through.

**Andrew:**

I would think so. And when we take it all together, hypertension, high blood pressure and also women just in heart disease, I mean, certainly some of it came with smoking, men - some were quitting, women weren't. Maybe you have other thoughts of that, and women being overweight. When it comes to your heart and certainly now with blood vessels to the brain women have to pay attention. And people are living longer and, as you said, it increases with age as you get postmenopausal. So you're blessed with a longer life, but there's some risks that go with it too.

**Dr. Scola:**

Right. And we think now every one in two people will develop some type of heart disease. And I think, again, these numbers are increasing in women. And I think that women really have to pay attention earlier in life to try and eliminate or control the risk factors that they have. So I think it's pretty important.

**Andrew:**

Right. Now let's just make sure for people who are listening, they're saying, okay, I'm going to get my blood pressure checked. But are there signs that they could also look for, symptoms of high blood pressure they should certainly pay attention to?

**Dr. Scola:**

Well, for the most part high blood pressure or hypertension, it's a silent killer. So most people don't have symptoms, you know, it just kind of wreaks havoc without people feeling anything. I will tell you one symptom that people can have is a headache. But you know a headache can mean many, many different things, but that is one symptom that people can have.

Other people might describe that they might feel a little bit more irritable, maybe if they drink a lot of caffeine. But for the most part hypertension is silent.

**Andrew:**

Could you have vision changes?

**Dr. Scola:**

Yes, yes.

**Andrew:**

Or blurry vision?

**Dr. Scola:**

Yes, yes. In addition, yes.

**Andrew:**

And then maybe some dizziness?

**Dr. Scola:**

You could, yes.

**Andrew:**

But again normally silent, and so those numbers are so critical. And so when somebody might want to put their head in the sand. So they go to the pharmacy and they're sitting there and they're waiting for the prescription for, you know, their mom or their daughter, and they're not really thinking about themselves but they put their arm in the blood pressure cuff and it shows 140 as the top number, 90 as the bottom number. And they say, oh, that can't be right, and they check it again and it is. You need to call your doctor, right?

**Dr. Scola:**

Right. I would encourage those people to call their doctor and discuss it with them and schedule an appointment so that the doctor or the nurse can check their blood pressure there.

**Andrew:**

So, Dr. Scola, we've put it all together. Obviously you want to control your weight. You don't want to smoke. You want to monitor your blood pressure. It sounds like something like 110 over 80 would be ideal, right?

**Dr. Scola:**

Yes. Less than 120 over 80, that's my goal.

**Andrew:**

There you go. And you may need to have salt out of your diet. You may need to watch what you eat. And then you might, if that doesn't control it, maybe there's a family history or you're in a situation of taking birth control pills or going through pregnancy, you might need some medication. That medication would vary by your situation. But working with your doctor to have at least tighter control is critical.

**Dr. Scola:**

Exactly.

**Andrew:**

We just want to take a moment and ask about people with diabetes, because we have over 15 million people in America now with adult onset diabetes. Even some kids now developing type II diabetes. And so concern there. I've heard lately that people with diabetes related to their cholesterol, certainly their blood sugar, but also with their blood pressure need to have tighter control, if you will.

**Dr. Scola:**

Exactly. So patients that have diabetes we would like to initiate medication on them most likely if their blood pressure it is greater than 130 over 80. So they have a little bit lower goals for blood pressure. You know, a lot of that too is to prevent the kidney disease associated with the diabetes. Because a combination of high blood pressure and having diabetes can increase the incidence of kidney disease as well as heart attack and stroke too.

So there are specific medications that we can put patients on that can control the amount of protein that they might leak into their urine which can be one of the things that can occur with diabetes.

**Andrew:**

Okay. So let's put this all together now. I think we've educated women pretty much to get mammograms and hopefully people do, 40 and over. They're very attentive to that. So they're worried about breast cancer. And we've been trying to preach to people to stop smoking. And I think women are starting to hear, the American Heart Association's Go Red campaign, etc., about heart attack.

**Dr. Scola:**

Right.

**Andrew:**

And now we need to talk to them about the risk of heart attack, stroke and heart failure, devastating things that can come from this silent killer. So those numbers related to blood pressure matter.

**Dr. Scola:**

Exactly.

**Andrew:**

Well, I know that you preach it a lot in your practice. And I think it's an ongoing dialogue with your doctor. As you said, some people, you know, they get a prescription and maybe they don't take it like they should and they go away and they don't want to come back and see you. Maybe they're embarrassed; they've

been forgetting to take their medicine. Don't be embarrassed. You have to have a dialogue with your doctor on what you can do that works for you, right?

**Dr. Scola:**

I agree.

**Andrew:**

Well, I'm a preacher here of Patient Power. That's what it's all about. I want to thank Dr. Renee Scola for being with us.

**Dr. Scola:**

Thank you, Andrew.

**Andrew:**

As always, we're learning. And it's certainly true about high blood pressure in women that knowledge can be the best medicine of all. So you want to prevent it if you can and then if you need control there are a variety of ways of doing it that we've heard about today. But the importance is do it, work with your doctor to keep that blood pressure low and avoid the health problems that could follow if you don't.

Now, in two weeks we're going to be back with another program on the HealthNet.nmh.org website, another Patient Power program. We're going to change gears. This one is going to be on the surgical treatment of lung cancer. And we'll have with us surgeon Matthew Blum. So join us for a live broadcast, one hour long, Tuesday June 12 at 7 p.m. Central. I hope you can join us.

This is Andrew Schorr thanking Northwestern Memorial for their dedication to educating all of us how we can live longer, healthier lives. See you next time.

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