



Scott Berman, M.D., FACS, and William Suggs, M.D., FACS, obtain femoral artery access for an aortogram.

Q&A: WILLIAM SUGGS, M.D., Comes to White Plains Hospital With Innovative Approaches and a Dedication to Vascular Care

WILLIAM D. SUGGS, M.D., FACS, DIRECTOR OF VASCULAR SERVICES AT WHITE PLAINS HOSPITAL, HAS A WEALTH OF EXPERIENCE THAT DATES BACK TO 1995 AS A CO-INVESTIGATOR OF CLINICAL RESEARCH PROTOCOLS, AND HE HAS TAKEN A LEAD ROLE IN SEVERAL MAJOR CLINICAL TRIALS THAT EXAMINED AND REFINED THE VASCULAR SURGICAL APPROACHES FOR BOTH ARTERIAL AND VENOUS DISORDERS.

BUT WHEN HE looks ahead at what's to come in the field of vascular surgery, he foresees the application of technology as the catalyst that will impel diagnosis and treatment to the next level. That means the specialty of vascular surgery promises greater options for patient therapy.

Dr. Suggs, previously an attending surgeon and an associate professor of surgery at Montefiore Medical Center and Albert Einstein College of Medicine, came to White Plains Hospital in February 2012.

By 2015, 87 million Americans older than 55 could be coping with vascular disease, according to the U.S. Census.



Dr. Berman and Dr. Suggs perform a peripheral intervention.

MD News had a conversation with Dr. Suggs about the role clinical research has played in his career and practice today, his special interests in the field of vascular surgery, risk modification, advances in technology, and the special patient relationships he has formed along the way.

Q You've been involved in a number of clinical trials. What is your philosophy about clinical research?

A: I think it's an essential part of what we do. If you just look at endovascular aneurysm repair, the clinical trials testing the devices that were developed by the industry really were essential in revolutionizing the care of aortic aneurysm. Over the years, I've participated in multiple clinical

trials with different devices and techniques. I was involved in some of the earliest device trials in aneurysm at Montefiore in the '90s. That really, from a historical perspective, gives me great insight into how far we have come and how much medical devices have improved.

With the trials, we've been able to objectively evaluate certain devices, and some devices proved to be quite durable and did what they're supposed to do. It turned out some of the early devices didn't work as well as they should have, and that was uncovered by the trial. Now there are probably four or five FDA-approved devices that are used for aneurysm care, and those were all born out of FDA-sponsored trials, so it's an essential part of what we do.

Q You've seen a real evolution in the technological standard of vascular therapy.

A: The technology of the devices has improved tremendously during the last decade, and that's true of almost all the endovascular devices we use. Just in

standard treatment of peripheral artery disease (PAD), all the wires, catheters and stents are technologically far better than they were a decade ago, which means ease of use. It's just opened up a whole new arena of minimally invasive treatments that were much more difficult to do 10 or 15 years ago.

Q Would you say you've also seen an evolution in your specialty?

A: If you look at vascular surgeons 15 years ago, we didn't traditionally do much of our own angiography or minimally invasive treatment, but vascular surgery has changed in the last 15 years. Once the vascular surgeon got involved in vascular treatment of aneurysms, they also began to expand their own involvement in minimally invasive treatment of peripheral vascular disease (PVD) and began to do their own angiography, angioplasty and stenting. In fact, it became part of the training of the vascular surgeon; it's now an essential part of what we do. Maybe at least half of what we do now is from a minimally invasive approach compared to open surgeries 15 years ago. It's been a complete change in how vascular surgery is practiced.

Right iliac artery angiogram



THE VASCULAR SURGEON'S ROLE IN PVD TREATMENT AND DIABETIC LIMB SALVAGE

THE TREATMENT OF peripheral vascular disease (PVD) is one of the most rapidly expanding fields of medicine today. At one time, patients who had PVD had few medical or surgical options. Now, with multidisciplinary teams approaching the problem, vascular surgeons are key players, and procedures such as endovascular techniques may soon replace as much as 50% of traditional vascular operations, according to the National Institutes of Health (NIH).

Endovascular intervention, which the NIH calls the fastest-growing area of vascular medicine, requires dedication on the part of practitioners because it demands such complete knowledge of vascular disease and of the anatomic changes experienced by the patient.

When treating PVD, conservative options such as lifestyle modifications and medications are typically attempted first. Only when more severe symptoms develop are angioplasty and bypass surgery taken into consideration as possible treatment options, and surgical bypass is indicated only in patients with severe arterial occlusion who are at risk of losing a limb or have nonhealing ulcers or gangrene.

Endovascular treatments are the first choice because they are as effective as surgery for many blockages, with fewer risks and a shorter recovery time, according to a collaborative report by the American Association for Vascular Surgery and the Society for Vascular Surgery, among others.

Still, surgical bypass is the gold standard for extensive vascular occlusive disease, but endovascular interventions, including percutaneous transluminal angioplasty and stent placement, are being used more frequently, particularly in patients with significant comorbid conditions, according to the American Academy of Family Physicians.

For those living with diabetes, vascular health issues can have an even greater impact. Diabetics are at higher risk for foot problems, meaning they are also at higher risk for PVD. The American Diabetes Association estimates one out of every three people with diabetes older than 50 has PVD.

Diabetes is a contributing factor in half of all lower extremity amputations in the United States, and the relative risk for amputation is 40 times greater in people with diabetes, according to published research.

Vascular specialists maintain a critical role in an interdisciplinary approach, as untreated inadequate perfusion to a limb will result in a nonhealing wound and possible amputation, according to a joint statement from the Society for Vascular Surgery and the American Podiatric Medical Association. Vascular surgeons improve pedal blood flow, greatly enhancing the body's healing capabilities.

The *Journal of Vascular Surgery* says the team approach to managing diabetic foot problems has placed a greater emphasis on the partnership between the vascular surgeon, the diabetologist and the podiatrist, and that collaboration can improve limb salvage and functional outcomes by as much as 86%.

Hospitals with multidisciplinary diabetic foot care programs are finding that including vascular surgeons in a primary role on the team makes their amputation prevention efforts more effective.

The techniques were always there. Traditionally, the interventional radiologists had been the mainstays of doing a lot of these techniques, but over time, the concept that you're not just a vascular surgeon in the classic sense — that you only do open surgery — changed, and you really became a vascular specialist and created almost a one-stop shop for the patient. The patient could come to a vascular surgeon, and the outcome could be no treatment, observation, minimally invasive treatment, angiography, stenting or open surgery, depending on what the condition was. Vascular surgeons are able to provide any of those elements of care.

Q What's the most significant experience you've had conducting a clinical trial?

A: I think being involved in endovascular aneurysm trials as a whole, because that's the one thing I think has dramatically changed. Carotid stenting was interesting, but it has not really replaced open surgery, whereas endovascular aneurysm repair has replaced a large portion of open surgery. I would say roughly 80% of all infrarenal aneurysms are treated endovascularly now, and that's probably a moderate estimate. If you look at a decade, that's a big difference. Fifteen years ago, 95% of them were done using an open approach, and now it's completely changed. Those series of clinical trials evaluating endovascular aneurysm repair were probably the most interesting to me.

Q How has your involvement in clinical trials influenced your work?

A: I think it's made me a better vascular surgeon, and I think it's let me evaluate my



A nurse monitors vital signs of a patient during a peripheral procedure in the catheterization lab.

techniques and look at results of my own surgery. It's made me say, 'We're doing these things. Is there a way to improve what we're doing, or should we be doing this differently?' It's made me critically evaluate my own results.

Q You have a special interest in open and endovascular repair of abdominal and thoracic aortic aneurysms, distal

artery reconstruction and carotid artery disease. What about these conditions interests you, and what has your focus been in these fields?

A: My interest in conditions of the lower extremities, such as PVD, is determining which patients will do better with endovascular techniques versus an open bypass. I'm interested in what's most cost effective. A lot of recent clinical papers have looked

at this. When a patient presents, depending on the level of disease and the indications for which you would do an intervention, sometimes open surgery is a more durable and cost-effective option than endovascular treatment. It depends on the age of the patient and what your goals are. It's not one size fits all, but you can create guidelines. Particularly because cost will be such a factor going forward, we really need to determine which techniques will be most efficient and cost effective and yield the best results for the patient.

Dr. Suggs consults with a patient in the White Plains Hospital Wound Care Center.



Q What advances in technology have improved the practice of vascular and endovascular surgery in recent years?

A: I'd say the improved techniques of the catheters and guidewires. The newer wires and catheters allow surgeons to open occlusions. For example, if you have total occlusion of an artery and can get a wire from the open artery through the



Dr. Suggs and Dr. Berman work closely, consulting over patient history prior to peripheral intervention.

occlusion to where the artery opens again, you can balloon that blocked artery open or stent it. So, what's happened is wires, catheters and some other devices have made it much easier to cross and open occlusions, and it's that improved technology that's allowed surgeons and interventionalists to provide more aggressive treatment.

People have developed newer techniques, but it's really the catheter and guidewire

technologies that have advanced. The equipment available to me now compared to 10 years ago is far better and much easier to use. Just the entire technology of the devices is better.

Q How do you see vascular and endovascular surgery advancing in the coming years?

A: I think what we're going to see is a real effort — now that we have increased our technological ability — to determine what

applications of those newer technologies really work for patients and what don't. There's a lot that we can treat, but we need to start looking at our outcomes and try to figure out the best treatment for certain disease entities or patterns.

Q What should physicians be telling their patients about peripheral vascular disease, deep vein thrombosis and other vascular disease?

A: First of all, clearly, if you smoke, you're at risk. If you have diabetes, you're at risk. If you have high blood pressure, you're at risk. If you have a family history, you're at risk. Vascular disease or disease of the artery is not just the legs or the arteries in the abdomen or the aorta; it's also the heart and the carotid arteries. It's a systemic disease. It may manifest itself in different areas more prominently than in others. For example, some people get really bad heart disease, but their legs are OK. Some people get really bad leg

The cardiac catheterization lab team



disease, but their hearts are not so bad. But generally, it's a systemic disease.

I think risk factor modification is the most important part of treatment, because you can't cure vascular disease, but you can certainly modify your risk factors. You can slow down or even halt the progression with real attention to diet, exercise, smoking cessation and cholesterol levels by putting the patient on statins.

If you have treatment, you can modify your behavior or things that put you at risk. I tell patients all the time, 'If you undergo a vascular procedure and you're a smoker, you need to stop. If you have uncontrolled diabetes, you need to get control of your glucose. Anything that you can do to modify the risk factors that gave you the disease in the first place will potentially slow the occurrence of any disease, and it makes the longevity of any treatment you get much better.'

Q What do you like about the practice of vascular and endovascular surgery?

A: What's particularly rewarding is to really change the way a patient feels or change his or her whole function when, for example, someone comes in with a very symptomatic leg and you do a bypass. Or, if a patient is about to lose a leg and you operate to enhance blood flow to the leg, you save his or her leg.

Also, what I didn't realize at the beginning is that most patients who have vascular problems tend to be your patients for a long time. Unlike many surgeons who treat a patient once and never see him or her again, I have some patients I've had for years and years. They come back for follow up on a periodic basis, or they come back for new vascular reasons.

I've created relationships with patients I've treated in the past, and sometimes years later, they will come back and see you again if you've established a good

relationship. It's rewarding, but it's also pretty fascinating because you get to find out what happened to them all those years.

Q What attracted you to White Plains Hospital?

A: The opportunity to grow the program and provide high-quality, personalized care for patients in an environment where I knew I would be supported was one I couldn't turn down. White Plains Hospital already had in place the key pieces to enhance its existing vascular program: experienced medical staff, Magnet-designated nurses and facilities well-equipped to handle vascular procedures. In addition to the OR and angio-suite, the hospital has a state-of-the-art interventional cardiac catheterization lab where many vascular procedures are performed.

For more information about White Plains Hospital's vascular services and White Plains Hospital Physician Associates, visit www.wphospital.org and www.wphphysicianassociates.org. ■

MEET DR. SUGGS

BEFORE JOINING WHITE PLAINS HOSPITAL as Director of Vascular Services in February 2012, William D. Suggs, M.D., FACS, served as an attending surgeon and an associate professor of surgery at the Montefiore Medical Center and Albert Einstein College of Medicine in the Bronx.

He was also the program director for the vascular surgery fellowship at Montefiore Medical Center.

Dr. Suggs received his medical degree from the former Bowman Gray School of Medicine (now Wake Forest School of Medicine) and completed his residency in general surgery at George Washington University School of Medicine. He completed a fellowship in vascular surgery at Emory University Hospital.

He is a Diplomate of the American Board of Vascular Surgery and a Fellow of the American College of Surgeons.

He has written numerous scholarly works that have been published in both nationally and internationally recognized surgical journals and books, and he has been co-investigator on several major clinical research protocols that examined and refined the vascular surgical approaches for both arterial and venous disorders.



Dr. Suggs reviews abdominal CT angiogram following endovascular repair of an abdominal aortic aneurysm.