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**Peripheral Arterial Disease Should Be Treated Nonsurgically First,  
Even in the Smaller Arteries**

***Highly Effective Interventional Treatment Preserves Future Treatment Options and  
Improves Patients Chances to Avoid Amputation***

NEW ORLEANS, Louisiana (April 2, 2005) — Interventional treatment should be considered the first-line therapy for all patients with peripheral arterial disease involving the superficial femoral artery (SFA), according to a new study presented today at the Society of Interventional Radiology's 30th Annual Scientific Meeting. Peripheral arterial disease, or clogged arteries from fatty plaque buildup, can be a very serious condition that causes decreased blood flow to the legs, which can result in pain when walking, and eventually gangrene and amputation. This study showed that interventional therapy in the SFA, even when it failed, did not compromise a patient's ability to go on to surgery and did not adversely affect amputation rates. The interventional treatment -- angioplasty with or without stenting -- had a 92 percent success rate in this study. The SFA are smaller vessels in the legs that are more difficult to treat and more prone to renarrow, because of their size.

"Surgical by-pass compromises the arteries and if it fails, angioplasty is no longer an option and patients go on to amputation. Conversely, our study shows that angioplasty, with stenting as needed, is highly effective, and if it fails, it doesn't affect future treatment options. Patients can have a second angioplasty if needed, or they can go on to bypass surgery. Thus, aggressive interventional therapy should be considered in all patients, because they are more likely to avoid amputation," says lead author Nael Saad, M.D., interventional radiologist, University of Rochester Medical Center, Rochester, New York.

**About the Study (Abstract 72)**

Data from this prospective series of patients undergoing interventional treatment of the SFA was collected between 1986 and 2004. Three hundred sixty patients (441 limbs) were treated with angioplasty and stenting as needed. Of these, 8 percent or 39 procedures were early failures. Those with TASC category D lesions, indicating the most severe disease ranking, were the most likely to be early failures. Early failure was not associated with significant morbidity or mortality, and the amputation rate was unaltered. Three-year follow up in all 39 treatment failures showed that 8 percent had a successful second interventional treatment and 49 percent had surgical bypass.

“In general, the long-term clinical results of angioplasty with or without stent placement to treat PAD are comparable to those of aortofemoral artery bypass surgery, with a much lower risk of associated morbidity and mortality. For peripheral arterial disease, in the SFA, surgery should be reserved for the few patients in whom stenting can’t be done or fails,” says Saad.

### **About Angioplasty and Stenting for Treating PAD**

Using imaging for guidance, the interventional radiologist threads a catheter through the femoral artery in the groin, to the blocked artery in the legs. Then he inflates a balloon to open the blood vessel where it is narrowed or blocked. In some cases, this is then held open with a stent, a tiny metal cylinder. This is a minimally invasive treatment that does not require surgery, just a nick in the skin the size of a pencil tip.

In general, balloon angioplasty and stenting has replaced invasive surgery as the first-line treatment for PAD. Randomized trials have shown interventional therapy to be as effective as surgery for many arterial occlusions, and in the past five to seven years, a very large clinical experience in centers throughout the world has shown that stenting and angioplasty are preferred as a first-line treatment for more and more processes throughout the body. Although PAD in general is treated nonsurgically, in many cases the superficial femoral artery is still being treated surgically.

### **About Peripheral Arterial Disease**

Peripheral arterial disease (PAD), also known as peripheral vascular disease (PVD), is a very common condition affecting 12-20 percent of Americans age 65 and older. PAD develops most commonly as a result of atherosclerosis, or “hardening of the arteries,” which occurs when cholesterol and scar tissue build up, forming a substance called plaque inside the arteries that narrows and clogs the arteries. The clogged arteries cause decreased blood flow to the legs, which can result in pain when walking, and eventually gangrene and amputation.

- PAD is a disease of the arteries that affects 10 million Americans
- PAD can happen to anyone, regardless of age, but it is most common in men and women over age 50
- PAD affects 12-20 percent of Americans age 65 and older

### **About Interventional Radiology**

An estimated 5,000 people are attending the Society of Interventional Radiology’s 30<sup>th</sup> Annual Scientific Meeting in New Orleans. Interventional radiologists are board-certified physicians who specialize in minimally invasive, targeted treatments performed using imaging for guidance to treat diseases nonsurgically through the blood vessels or through the skin. By combining diagnostic imaging expertise with advanced procedural skills, interventional radiologists perform minimally invasive treatments that have significantly less risk, less pain, and less recovery time than open surgery. Interventional radiologists pioneered minimally invasive modern medicine with the invention of angioplasty and the

catheter-delivered stent, which were first used to treat peripheral arterial disease. More information can be found at [www.SIRweb.org](http://www.SIRweb.org)

***Interviews and broadcast quality video footage are available.  
Abstracts can be found at [www.SIRmeeting.org](http://www.SIRmeeting.org) in the program section and click on  
scientific sessions.***

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