# Vascular IR Critical Limb Ischemia Management Program at Rush

Critical limb ischemia is the end stage of peripheral arterial disease (PAD). With early detection and intervention on PAD, providers can prevent critical limb ischemia and major amputation for patients. Once a patient has a major amputation, above or below the knee, their mortality rate increases 50 to 60 percent within four years. This is higher than most cancers.

Rush is one of the only academic medical centers in Chicago and the Midwest to perform complex revascularization to restore blood flow and salvage limbs. Rush's vascular interventional radiologists are board certified endovascular specialists that have pioneered and implemented complex procedures in many disease processes. For PAD and critical limb ischemia, the interventional radiologists have provided second and third opinion services and procedures for patients that have been told there are no other options. Many patients have had their limbs saved due to their expertise. This is in part due to our collaborative podiatric surgeons providing high-level limb management. In cases where open surgery is needed, our physicians work in tandem with Rush vascular surgeons to deliver the best possible outcome for patients.

# **Virtual Consultations**

Virtual consultations are available for patients who live outside of the Chicago region. In some cases, non-invasive tests can be completed with the patient's primary care provider and shared electronically with Rush's interventional radiology team.

# **Our Techniques**

# **Complex Revascularizations**

Revascularization is used for patients with claudication, ischemic rest pain or non-healing wounds due to poor blood flow. Complex revascularization of occluded arteries and veins to restore bloodflow, with pinpoint puntures, is often an outpatient procedure. This can create a non-surgical bypass. Many innovative revascularization techniques have been developed and taught to the medical community by interventional radiologists at Rush. Their work in this area includes the following:

- Outcomes of below ankle interventions with or without femoral, popliteal and tibial interventions in the setting of Rutherford 5-6 patients
- Role of Stent Grafts and Helical-Woven Bare-Metal Stents in the Superficial Femoral and Popliteal Arteries
- Rock-Hard Chronic Thrombotic Occlusion and Its Management in Endovascular Interventions

### Deep venous arterialization (DVA)

DVA is a technique used for patients who have no other option but amputation. A connection is formed between the patient's proximal arterial inflow and distal venous outflow with disruption in the vein valves in the foot. This allows blood to reach the foot and potentially assist in healing the chronic wound. This is a relatively new outpatient procedure and shows promise for patients with limited options.

To refer a patient, please call (312) 563-4238



Rush University Medical Center is ranked 20th in the country and is on the Best Hospitals Honor Roll.

#### Locations

# Rush University Medical Center

Professional Building 1725 W. Harrison St., Suite 450 Chicago, IL 60612

#### Rush Oak Park Hospital

520 S. Maple Ave. Oak Park, IL 60304



# **How Can I Help My Patients Prevent Critical Limb Ischemia?**

Critical limb ischemia is often underdiagnosed, undertreated and undermanaged. You can help your patients with early detection of undiagnosed PAD and ischemia. Interventional radiologists at Rush have developed a screening tool to catch patients before they reach a progressive state. Some screening questions to ask your patients include:

- 1. Do you have wounds that are not healing?
- 2. Do you have leg pain that wakes you up at night? Do you need to dangle your legs to relieve the pain?
- 3. Have you noticed shiny, smooth skin and loss of hair on the legs or feet?
- 4. Have your nails thickened?
- 5. Do you diabetes and/or kidney failure?

Patients who respond "yes" to some of these questions on the screening form will be identified and asked to have an ultrasound or ankle-brachial index test performed. The results will determine if they have any issues that need medical management so they can be monitored before it reaches a state of critical limb ischemia.

For more information or education on critical limb ischemia, please call (312) 563-4238.

**Our Team** 

# **Vascular Interventional Radiologists**



**Bulent Arslan, MD**Division Chief, Vascular and
Interventional Radiology
Chair, PAD Service Line, Society
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