Our program provides patients specialized care for fibromuscular dysplasia (FMD), a commonly misdiagnosed condition in which the artery is abnormally formed, causing portions to thicken, narrow and even enlarge, making it difficult for blood to flow through them.

**OUR APPROACH**

The Massachusetts General Hospital Fireman Vascular Center is one of the only vascular centers in the country with specialists in every area of vascular disease. Our physicians are known nationally for their expertise in diagnosing, treating and helping patients manage fibromuscular dysplasia (FMD).

**A MULTIDISCIPLINARY APPROACH TO TREATING FIBROMUSCULAR DYSPLASIA**

Because FMD is a relatively uncommon condition, it is often undiagnosed or misdiagnosed as symptoms can be completely absent or difficult to detect. It commonly affects young women who have been healthy up until this point in their lives.

Our Fibromuscular Dysplasia Program brings together a team of clinicians who work together to first diagnose and then develop a recommended treatment plan for patients with FMD. These clinicians bring expertise from a wide range of disciplines including:

- Cardiology/vascular medicine
- Gastroenterology
- Genetic research
- Nephrology
- Neurology
- Neuroendovascular therapy
- Neurosurgery
- Obstetrics and gynecology
- Psychiatry/psychology
- Vascular and endovascular surgery
- Vascular imaging and intervention

We work together with patients and referring physicians to coordinate a personalized treatment plan for each patient.

**SPECIALISTS DEDICATED TO VASCULAR IMAGING**

To accurately diagnose FMD, our team includes vascular imaging specialists who are trained to detect abnormalities in the vascular system.

These vascular imaging specialists are board certified and are fellowship trained with additional specialization in vascular procedures. Depending on the patient, we may use one or more techniques to diagnose FMD, including:

- Computed tomography angiography (CTA), which uses a combination of X-rays, contrast dye and computer technology to produce cross-sectional images of the body
- Contrast arteriography, which uses contrast dye to see the inside of blood vessels and organs of the body, especially the arteries, veins and chambers of the heart
- Duplex ultrasonography, a technique that uses high-frequency sound waves and a computer to create images of blood vessels, tissues and organs. Duplex ultrasonography is used to measure and assess the flow of blood
- Magnetic resonance angiography (MRA), a noninvasive procedure that uses a combination of a large magnet, radiofrequencies and a computer to produce detailed images of organs and structures within the body

Many of our diagnostic tests are also available at our convenient Waltham location.

To request an appointment, call 877-644-8346
massgeneral.org/fmd-appointment
LEADING TREATMENTS FOR FIBROMUSCULAR DYSPLASIA
Clinicians in the Fibromuscular Dysplasia Program are national leaders in the medical, endovascular and surgical treatment of vascular disease. Treatment is determined according to the severity of a patient’s condition and includes:

• **Medical therapy:** Medications used to manage FMD include antiplatelet and anticoagulant drugs to prevent blood clots, and drugs to control blood pressure.

• **Minimally invasive endovascular therapy:** Physicians may use a minimally invasive procedure known as percutaneous transluminal angioplasty (PTA) to open narrowed sections of arteries affected by FMD. In this technique, a balloon-tipped catheter (thin, flexible tube) is threaded through the affected artery to expand it. A stent, which is a tiny metal-mesh tube, may occasionally be inserted to keep the artery open. PTA is less invasive than open surgery and results in faster recovery times.

• **Surgery:** This intervention re-routes blood flow around the diseased artery and may be used in severe cases or when PTA is not an option.

LIFELONG SUPPORT FOR PATIENTS
Although FMD can be controlled successfully, there is no cure. For some patients, FMD may be a recurring condition that requires lifelong monitoring by your physician. Depending on your individual case, we may recommend follow-up visits at a frequent occurrence at first, and then ultimately once or twice a year. Because FMD can increase the risk of high blood pressure, impaired kidney function, aneurysm, stroke and other complications, we carefully watch patients for these possible complications. We collaborate with specialists who are knowledgeable about the implications of FMD on other aspects of your life. If needed, we can also refer you for:

• **Psychosocial treatment:** FMD often affects young, otherwise healthy women, and coping with it can be difficult. We work closely with the Benson-Henry Institute for Mind Body Medicine, psychologists and other mental health professionals who offer counseling to help patients deal with the stress and anxiety that may accompany the condition.

• **Obstetrics and gynecological care:** Specialists in obstetrics and gynecology can advise patients with FMD about the use of oral contraceptives, estrogen therapy and other hormone-based medications, which can affect blood flow in the arteries.

• **Genetic counseling:** Because FMD appears to run in families, women of childbearing age may receive counseling about the genetic basis of the condition.

ADVANCING RESEARCH AND INNOVATION
As an academic medical center, Mass General invests in research to understand disease and develop new approaches in treatment. We participate in the National Fibromuscular Dysplasia Registry, which collects data from different centers throughout the United States on FMD cases. Data in the registry is used by researchers and clinicians to better understand and improve the diagnosis and treatment of FMD. Each patient who is seen in our program is asked to participate. Consenting patients allow us to enter data about patient history, symptoms, findings on imaging tests and treatment into this registry. Data entered does not include any personal identification.

CONVENIENT WALTHAM LOCATION
Specialists in the FMD program practice at Mass General and at our convenient location in Waltham. Mass General West offers outpatient services for people with FMD, including imaging, consultation and coordinated care with multiple specialists. Free garage parking is also available.

ONE CALL COORDINATES CARE
Our dedicated nurse coordinator, who is very knowledgeable about FMD, is available Monday through Friday from 8:30 am to 5:00 pm to take relevant information about your condition and FMD-related symptoms and to make a timely appointment with the most appropriate specialist.

We strive to see patients as soon as possible and assign every patient one clinician to organize care among members of our multidisciplinary team. From diagnosis to treatment and follow up, this clinician guides patients through the treatment process.