William Turnipseed, MD, has been treating patients with compartment syndromes since 1980, the year that he redesigned the surgical treatment for the condition. Since then, UW Health vascular surgeons have treated more than 2,100 patients who have muscles, nerves and blood vessels that are compressed within enclosed spaces of their lower leg.

Chronic compartment syndrome, often caused by overuse injuries, is commonly treated at UW Health. In these cases, prevalent among athletes, there is an injury to the muscles which causes uncontrollable swelling, isolated muscle cramping and pain that lasts for several hours or days, and is not relieved by medication or elevation. Dr. Turnipseed notes that chronic compartment syndrome is often diagnosed among track and cross-country runners and football players, and is most prevalent in patients in their late teens and early twenties. He also says, “As the expansion of sports has impacted more female athletes, we have seen an increase in the number of women with chronic compartment syndrome.”

Today, up to 70 percent of the cases involve women, many who are runners or soccer players. However, compartment syndrome can affect any type of athlete, most often those with well-developed musculature in the leg.

Acute compartment syndrome is less common and may be the result of blunt trauma or penetration, such as with a car or motorcycle accident, crush injury or surgical complication.

Surgical treatment is available for acute and chronic compartment syndrome. Small skin incisions are made and sections of fascia are removed to release pressure. For acute cases, the wounds are left open, and then closed 48–72 hours later. Both procedures are generally covered by insurance. Skin grafts may be required to close the wound.

Incisions for chronic compartment syndrome are small (two inches) and closed after fascia removal. The procedure is generally covered by insurance.

UW Health’s success rate for compartment syndrome is more than 90 percent. Dr. Turnipseed notes that five to six percent of patients may get a recurrence, and another 20 percent may develop compartment syndrome in another muscle group.

Early on, patients were referred to UW Health primarily by sports medicine and orthopedic physicians when compartment syndrome was suspected. Today, patients are referred by their primary care providers as well as by coaches, trainers and physical therapists. Since the 1980s, many patients who have had previous surgical failures or have been unable to obtain a correct diagnosis, have found the UW program through Internet searches and online publications. Dr. Turnipseed says, “Because of this trend, we are treating more patients from across the region and nation, working closely with their providers to obtain diagnostic studies and authorizations and to develop long-distance post-operative care plans.”

Dr. Turnipseed says that when compartment syndrome was first diagnosed it was often more than two years after the symptoms began. Today, most diagnoses are made within six months. He adds, “The key is to have an index of suspicion. If you have young healthy adolescents and adults without obvious physical injury or circulatory problems, but have isolated muscle cramping and sensation changes in the tops or bottom of their feet, they may have compartment syndrome.”

To refer a patient, please call (608) 265-4420.