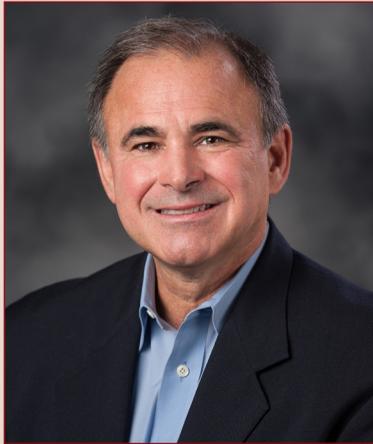


# Exertional Dyspnea Secondary To Iliac Vein Occlusion, Treated By Recanalization



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Welcome to the September edition of *Vascular Disease Management*. I have chosen to comment on Dr Robert Attaran and colleagues' article "Exertional Dyspnea Secondary to Iliac Vein Occlusion, Treated by Recanalization." I have chosen this article as it eloquently describes the physiological basis of dyspnea and impaired exercise capacity secondary to impaired venous return to the heart. In this case the dyspnea, caused by occluded iliac veins, resolved following lytic therapy and iliac vein stenting. Pulmonary embolism, lung diseases, and cardiac causes of dyspnea and impaired exercise capacity were meticulously excluded before investigating impaired venous return as a possible etiology of this patient's symptoms.

Although impaired venous return from other types of venous disease had been previously demonstrated to be associated with these symptoms, this is the first case report that I can find where iliac vein occlusion was established as the etiology of exertional dyspnea and diminished exercise capacity and where there was symptomatic improvement following iliac venous stenting.

Iliac vein compression and occlusion are diagnosed and treated with iliac venous stenting far more commonly, and at a rapidly increasing rate, since Seshadri Raju, Sam Owen, Jr., and Peter Neglin's seminal article in 2002 demonstrating the safety and benefit of stenting of the central veins of the lower extremities. Raju and colleagues explained in this article that central venous compression or occlusion is common and must be considered particularly in cases of non-healing venous ulceration, profound venous insufficiency, and symptomatic venous stasis not explained by other etiologies. Potential etiologies demonstrated were thrombosis, webs, and venous compression. The importance of the utilization of intravascular ultrasound (IVUS) to make the diagnosis and to guide therapy was established. They demonstrated dramatic symptomatic improvement in patients following treatment with stenting. They also demonstrated that stenting could be performed safely in an outpatient setting with excellent

long-term stent patency. Since that time, many benefits have been ascribed to central venous stenting, resulting in a dramatic increase in the utilization of this treatment by health-care practitioners.

The diagnosis of central venous disorders is sometimes relatively simple, but in most cases the diagnosis requires a high index of suspicion and careful evaluation. IVUS remains the "gold standard" of diagnostic tests, and this is, of course, invasive. This article may lead practitioners to consider the diagnosis of central venous disorders in cases of unexplained exertional dyspnea and exercise intolerance.

I have often referred to the venous system as "the forgotten side of the circulation." This is changing, as there has been a dramatic increase in evaluation and treatment of venous disorders by vascular specialists. These treatments have resulted in ulcer healing and dramatic symptomatic improvement. Pioneering work in understanding anatomy and physiology in this field by Raju and colleagues, Patricia Thorpe, and others has led the way for practitioners to help these patients. Perhaps Attaran et al's meticulous physiological evaluation of this patient to establish iliac obstruction impairing venous return as the etiology of exertional dyspnea and diminished exercise capacity may be another clue to prompt investigation of unsuspected central venous disorders.