



## Enhancing PE/DVT patient outcomes and experiences

### COLLABORATIVE TREATMENT. EXPERT CARE.

#### Cardiovascular medicine

Dr. Farid Jalinous Interventional Cardiologist

Dr. Sreenivas Kamath Interventional Cardiologist Dr. Blair MacPhail Interventional Cardiologist

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Jami Kamp, NP

Nickie Ralston, NP

#### Cardiac electrophysiology

**Dr. Djavid Hadian** Electrophysiologist

#### Vascular surgery

**Dr. Nathaniel Dew** Vascular Surgeon

**Dr. Thomas Etter** Vascular Surgeon

**Dr. John Martens** Vascular Surgeon

#### Radiology

Dr. Charles Bower Interventional Radiologist

Dr. Justin Lightburn Interventional Radiologist

> Dr. LeRoy Weaver Radiologist

To refer a patient to the Goshen Heart & Vascular Center, call (574) 364-3921 or fax a referral form to (574) 533-7145. By Drs. Charles Bower and Justin Lightburn

#### New treatment capabilities available

Goshen Heart & Vascular Center has a new tool in its armamentarium for pulmonary embolism patients. The Inari Flow Triever™ device effectively aspirates clots out of the pulmonary arteries. As a result, patients can often be spared the need for an extended ICU stay and drip TPA.

A great example of the efficacy of this device was a recent case involving a patient who suffered a massive PE. His situation was so severe that, at one point, he actually required emergency CPR. Shortly afterwards, we employed this new technology to perform the pulmonary embolectomy. As a result, the patient was able to go home just a few days later.

We have been using this device for the better part of a year now. It uses a catheter to remove clots from the lung arteries and body, thus restoring blood flow and the patient's ability to breathe. Having this new capability is all the more timely given the apparent increased risks of clotting attributable to COVID-19 infections. A companion device can also be used for extraction of deep venous thrombosis for selected patients with severe deep venous thrombosis (DVT).



Blood clots removed recently using interventional radiology techniques

#### Who are the best candidates for this new procedure?

As indicated, the device has specific indications. As far as identifying the ideal patients for referral, however, the ideal candidates are patients with submassive PE and evidence of cardiac or hemodynamic compromise.

Historically, pulmonary embolism has most often been treated with blood thinners such as heparin or warfarin. The problem with blood thinners is that, while they are

satisfactory treatments for small clots and keeping them from getting larger, the patient's condition may be too severe to wait for resolution on anticoagulation alone. The traditional alternative to this new procedure has been open chest surgery. This, of course, is highly invasive, traumatic and typically requires months for the patient to fully recover. This new technology is proving to be a real game-changer in terms of enhancing PE patient outcomes and overall recovery experience.

#### A few words about treating PAD

Incorporating advanced capabilities such as this new device into the treatment options we offer is consistent with our ongoing commitment to provide services that are as least invasive and patient friendly as possible. In a 2020 issue of Spotlight, we discussed advanced solutions for the treatment of peripheral artery disease. Using technologies like an excimer laser for treating softer lesions, an orbital atherectomy device to grind up calcified plaque, and high-intensity shockwave balloons to break up arterial plaque are just a few examples of the latest treatments available for PAD.

Thanks to the many contemporary advances in medical technology, interventional radiology is particularly well suited to provide minimally invasive treatments for PE, DVT, PAD and a host of other ailments.



**Dr. Charles Bower** is a board certified interventional radiologist who uses image guided and other advanced techniques to treat a variety of medical conditions. He specializes in peripheral vascular disease and interventional oncology procedures as well as pulmonary embolism and deep vein thrombosis.

**Dr. Justin Lightburn** is a board certified interventional radiologist who serves as the Director of Interventional Radiology for Goshen Hospital. He treats peripheral artery disease, vascular malformation, carotid artery disease, aortic aneurysm, pulmonary embolism and venous insufficiency.



# Enhancing PE/DVT patient outcomes and experiences through new treatment capability

This publication is for healthcare providers

## Interventional radiology techniques and procedures performed at Goshen Health:

- Interventional oncology procedures include radioembolization of tumors, chemoembolization of tumors, percutaneous microwave, radio and cryoablation of tumors
- Full range of endovascular treatments within the peripheral and visceral vascular beds, including thrombolysis, atherectomy, angioplasty, stent placement, embolization and treatment of aneurisms. CT guided biopsy and drains
- Thoracentesis, tunneled pleural catheter (Pleurx)
- Paracentesis, tunneled peritoneal catheter (Pleurx)
- Visceral angiogram and interventions, including coiling of aneurisms, control of GI bleeding and vertebroplasty/kyphoplasty
- Endovascular repair of aortic aneurysm (EVAR)

- Uterine fibroid embolization (UFE)
- · Prostate embolization in conjunction with urology
- · Lumbar puncture, myelography
- Treatment of DVT (deep vein thrombosis)
- Pain management, including joint injections and epidural steroid injections
- Dialysis access maintenance
- · Vascular malformation
- Venous insufficiency
- Hemorrhoid treatment

#### **TO REFER A PATIENT**

To refer a patient, fax a referral form to (574) 533-7145. A referral form can be downloaded at GoshenQuickGuide.com. Call for an appointment at (574) 364-3921.

We make every effort to see referrals the same day or within 24 hours as needed.

If you would like more information or to meet any of our doctors, please contact **Jenny Rupp, Physician Liaison,** at **JRupp2@GoshenHealth.com** or **(574) 364-2978**.