Education

Both medical students and general surgery residents rotate through our service. Many students have participated in research projects with us through the senior major program that has gone on to publication. Residents rotating through our service enjoy participating in the clinical care of our patients, involving themselves in our clinical research efforts, and many have gone on to careers in vascular surgery.

Research

Clinical research studies have a day to day relevance in our delivery of care. Currently, we are actively investigating and accurately adjusting cardiac risk in our patients to help direct them away from therapies where the chance of cardiac complication were too high - looking specifically at gender and its relationship to functional outcome following lower extremity bypass as well as use of IV insulin protocols in diabetic patients to help reduce post-op complications-specifically infectious.

Our research activities currently include participation in clinical trials and research utilizing the Vascular Study Group of New England (VSG-NE) vehicle. Our clinical trials span the use of experimental covered stents to participation in percutaneous treatment of reno-vascular hypertension, to the use of post-operative adjuncts like insulin protocols to reduce patient morbidity.

Vascular Study Group of Northern New England

Since 2003, our surgeons have participated in the Vascular Study Group of Northern New England. The stated mission of the study group is "The Vascular Study Group of New England is a voluntary, cooperative group of clinicians, hospital administrators, and research personnel organized to improve the care of patients with vascular disease. By collecting and exchanging information, the group strives to continuously improve the quality, safety, effectiveness, and cost of caring for patients with vascular disease."

Participation in this group has led to relevant clinical research studies that affect our clinical practice every day. Some examples are:

- Evaluating cardiac risk in vascular surgical patients
- Choosing appropriate interventions when more than one therapeutic option is available
- Instituting processes to help reduce the risk of post-op cardiac events and wound infections.

These are just a few examples steps taken to improve the care of our vascular patients using collaborative, relevant clinical research. <u>Visit the VSGNE website</u>

Innovative Hybrid OR Suite

The University of Vermont Medical Center is constructing a state-of the art hybrid suite in its operating room. The thrust of this project is to allow for intra-operative fluoroscopic imaging of the arterial and venous circulation. Fixed fluoroscopic imaging in an operating room suite will allow our surgeons to expand their use of less invasive and endovascular techniques. This suite will allow many more patients to be treated utilizing less-invasive techniques. Complex aortic reconstructions, multiple level lower extremity disease and emergent aortic repairs are just some of the pathologies that will now be addressed using less invasive/endovascular techniques.

Patient Care

Experienced and highly trained surgeons, nurses and support staff help work with patients, their family and friends through evaluations, operations and post-surgical follow-ups to assure high quality care. Among the conditions that our vascular surgeons treat are:

- Blockages in the neck arteries that can cause strokes
- Blockages in the leg arteries that can lead to serious debilitation
- Aneurysms of the aorta and its branches
- Chronic disorders of the veins in your legs
- Compressed blood vessels or nerves in the thoracic outlet
- Other blockages in the arteries of the body which can lead to:
 - Inability to eat and gain weight (Mesenteric Occlusive Disease)
 - High blood pressure (Renal Artery Hypertension)

The University of Vermont Medical Center offers the full scope of surgical treatment for vascular disease including:

- Minimally invasive or percutaneous techniques (stenting, angioplasty)
- Traditional surgical therapies (bypass, endarterectomy or removal of plaque, and aneurysm repair)
- Treatment of chronic lower extremity ulcers due to diseases of the veins (thrombosis, phlebitis)

Visit <u>Vascular Surgery</u> at The University of Vermont Medical Center, our clinical teacher partner.