

Clinical Perspectives

Atrial Fibrillation Ablation

Now Available at Akron General

When chronic or paroxysmal atrial fibrillation cannot be controlled by antiarrhythmic medications, or the patient is unable to tolerate these agents, cardiac ablation is an excellent treatment option. In 80% of adults who undergo this nonsurgical procedure, atrial fibrillation is eliminated and medical therapy is no longer required. The remaining 20% may require a second or, rarely, a third procedure to achieve success.

The procedure of choice for treating atrial fibrillation is pulmonary vein antrum isolation (PVAI), also called pulmonary vein ablation. Due to the special electrophysiology training and facilities required, PVAI is performed only in selected medical centers such as the Cleveland Clinic, and now Akron General as well.

To perform PVAI, a catheter is inserted into the femoral vein and advanced to the heart. Two catheters are inserted into the right atrium and two into the left atrium.

The left atrium is accessed through a trans-septal puncture, and intracardiac echocardiography is used to visualize the atrium during the procedure. One catheter is used to locate the abnormal impulses coming from the pulmonary veins; the other is used to deliver radiofrequency energy to create lesions surrounding the pulmonary veins. The procedure is repeated for all four pulmonary veins. These lesions heal in four to eight weeks, forming a circular scar that blocks impulses from within the pulmonary veins. This effectively disconnects the pathway of the abnormal rhythm and cures atrial fibrillation.

In some patients, ablation also may be performed in the superior vena cava, as well.

The procedure has a complication rate less than 1%. Due to extensive experience with atrial fibrillation ablation, very complex cases can be treated, including patients with prosthetic valves and those who have undergone unsuccessful AV node ablation. If your patient has symptomatic atrial fibrillation, referral for an evaluation may be obtained by calling 330-344-4377 or 33-344-4EPS.



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Cleveland Clinic to Provide Arrhythmia Services at Akron General



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Akron-area patients will no longer have to drive to Cleveland for sophisticated electrophysiology (EP) services such as atrial fibrillation. The world leaders are coming to Akron General's Heart & Vascular Center.

Six Cleveland Clinic electrophysiologists will provide full EP services, including medical, device and procedural therapy at Akron General on a full-time basis. Their expertise compliments the high-quality care that cardiologists at Akron General already provide. The demand for EP services has grown more rapidly than anticipated. The number of trained electrophysiologists is insufficient to meet the needs of patients nationwide. Furthermore, the extreme complexity of a procedure such as atrial fibrillation ablation further limits its availability.

The Cleveland Clinic has earned a reputation for working in a collegial fashion with referring physicians locally, nationally and internationally. In this new collaboration, they emphasize that their goal is to work with Akron General cardiologists and referring physicians to provide world-class care for patients. Since good physicians doing great work make for success, Akron General is confident that area physicians and patients will be very pleased with this new program.

For more information about the Cleveland Clinic Cardiac Rhythm Program at Akron General, call 330-344-4377 or 330-344-4EPS.



Lung Cancer Center Benefits:

- Expedited Testing
- Speedy Diagnosis
- Rapid Treatment
- Coordinated Follow-up
- Patient Education and Support

Multispecialty Approach to Lung Cancer

Facilitates Rapid Diagnosis and Treatment

Akron General Medical Center’s Lung Cancer Center facilitates the timely diagnosis and treatment of Lung Cancer. The Center offers rapid evaluation of patients with worrisome masses, lymph nodes, or the presence of hemoptysis. A pulmonologist and/or cardiothoracic surgeon will complete an initial assessment to establish the diagnosis, treatment and a plan of care. Referrals are made to a medical oncologist or radiation oncologist as appropriate. A registered nurse coordinator is present to assist in the implementation of the plan and to provide education and support to the patient and their family. The primary care physician is kept fully informed of the patient’s outcome and plans every step of the way. The Lung Cancer Center has been able to meet its goal of diagnosing lesions within 14 days of the initial evaluation. Also, treatment for lung cancer has been initiated within 30 days from the date of diagnosis.

The Center benefits patients through more rapid diagnosis and treatment. Previously, by the time most patients seek a physician’s care for symptoms, the disease had advanced, and treatment efficacy diminished. Survival is often dependent on early diagnosis and treatment with chemotherapy or surgery. Unfortunately, the diagnostic process can



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often take several months, during which time the tumor can grow and metastasize.

More fortunate are those in whom a lung nodule is discovered during a routine physical exam, before symptoms appear. Upon their referral to the Lung Cancer Center, a definitive diagnosis is made and treatment is started for malignant disease or patients with benign nodules are relieved at their news.

At the Lung Cancer Center, a nurse coordinator and pulmonologist or thoracic surgeon assess the patient to establish a diagnosis. Depending on the findings, they work with AGMC radiologists and pathologists to expedite testing. The patient’s case is discussed at the weekly Tumor Board meeting to help finalize the optimal treatment plan and make referrals to a surgeon or oncologist as necessary.

The nurse coordinator assists the patient throughout treatment and provides education and support to the patient and family. Feedback from patients and referring physicians has been very positive.

Appropriate patients include those with suspicious nodules or masses and those coughing up blood. Call the Lung Cancer Center at 330-344-2778 with questions. Referrals can be made through Akron General’s Centralized Scheduling at 330-996-5760.

EMPHYSEMA TRIAL UNDERWAY

AGMC is involved in a national, multi-center clinical trial to evaluate biologic lung volume reduction in patients with advanced upper lobe predominant emphysema.

To be eligible for enrollment in this trial, patients must meet the following main inclusion criteria:

Patients must have a clinical diagnosis of advanced upper lobe predominant emphysema, be 40 years of age or older, and have disabling emphysema despite standard medical therapy.

Study candidates must also be free from co-morbid conditions that could adversely influence outcomes and be able to tolerate bronchoscopy under conscious sedation.

For more information, contact Sanjiv Tewari, MD, at 330-344-6676, or research nurse Debbie Hudock at 330-344-1570.



Sanjiv Tewari, MD
Chairman, Medicine
Akron General Medical Center

WOUND CENTER TREATS THE MOST COMPLEX WOUNDS

For 12 years, the Wound Center at Akron General has provided state-of-the-art care for patients with all types of wounds. Wound Center staff includes a dermatologist, vascular medicine specialist, podiatrist, two orthopaedic surgeons specializing in the foot and ankle, two plastic surgeons, a nurse practitioner, and nurses certified in wound and ostomy care. Five of these specialists have been with the Wound Center since its inception.

Clinicians at the Center work to accelerate the healing process using the most advanced evidence-based options and products. Wounds are measured and documented with photos to accurately assess healing. There are many reasons and combinations of reasons why a wound will not heal, so when improvement is not seen, a new approach is tried. Some wounds resist healing despite exhaustive efforts, and in these cases, palliative care to prevent infection is provided.

The availability of this multidisciplinary expertise enables the Center to offer sophisticated care for wounds located anywhere on the body. In any given week, patients with venous ulcers, pressure ulcers, infectious ulcers, pyoderma gangrenosum, lymphedema with ulcers, and postsurgical wounds are seen. When necessary, colleagues in infectious disease, endocrinology, hyperbaric oxygen therapy and hospitalists are consulted.

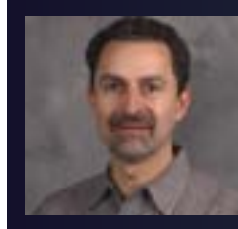
Referrals to the Wound Center can be made by calling Centralized Scheduling at 330-996-5760. A particular physician or specialty may be requested or leave the choice to the trained schedulers.

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2. Steed DL, Edington H, Moose HH, Webster MW. Organization and development of a university multidisciplinary wound care clinic. *Surgery.* 1993;114(4):775-778.



Wound Center surgeon Michael Parker, MD, examines a patient.



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HYPERBARIC OXYGEN UNIT



The Hyperbaric Oxygen Unit at Akron General Medical Center is accepting referrals from physicians for patients who may benefit from hyperbaric oxygen therapy (HBOT).

Hyperbaric oxygen therapy is a medical treatment administered by delivering 100 percent oxygen at above atmospheric pressure to a patient in an enclosed, clear acrylic chamber. The combination of high concentrations of oxygen and increased pressure causes increased levels of oxygen to dissolve in the blood and other tissues. HBOT may be used alone as the standard of care in several acute conditions but more commonly is used as an adjunctive therapy in combination with other medical (i.e. antibiotics, wound care) and surgical procedures.

Indications for hyperbaric oxygen therapy are:

- Arterial gas embolism (air or gas)*
- Carbon monoxide poisoning and smoke inhalation*

- Carbon monoxide poisoning complicated by cyanide poisoning*
- Decompression illness*
- Acute peripheral ischemia
- Crush injury and compartment syndrome
- Clostridial myonecrosis (gas gangrene)*
- Necrotizing soft tissue infections (subcutaneous tissue, muscle, fascia)
- Preservation of compromised skin grafts and flaps
- Enhancement of healing in selected problem wounds
- Exceptional blood loss anemia
- Radiation tissue damage - osteoradionecrosis (mandibular)* and soft tissue radionecrosis
- Chronic osteomyelitis (refractory to antibiotics and surgical debridements)
- Refractory mycoses
- Chronic diabetic lower extremity wounds (Wagner grade III or higher wound that has failed to respond to standard wound care for at least 30 consecutive days)

For more information about hyperbaric oxygen therapy at Akron General, call Vicky Erdman, RN, at 330-344-6823.

(* Denotes standard of care)

Clinical Perspectives

Early Reinforcement Can Prevent Consequences of Bone Metastases

By **Mark C. Leeson, MD, FACS**

Prophylactic reinforcement of major bones affected by metastatic disease can prevent painful fracture and associated loss of quality of life. Although the underlying cancer cannot be cured, patients are able to remain mobile and comfortable. As a result, they continue to enjoy life and tend to live longer with their disease.

More than one million new cases of cancer are diagnosed yearly. Treatment advances are resulting in increased survival rates and more patients living with metastatic disease to the bone; 90% of patients with breast cancer eventually develop bone metastases. The rate is nearly as high with cancers of the prostate, lung and kidney.

Metastases to the bone can be devastating, since the underlying cancer affects the immune system and prevents fractures from healing. A fracture of the femur, tibia, or knee can result in extreme pain, total loss of mobility, and confinement to bed.

Providing structural support early in the metastatic process through the use of reinforcing metal rods or plates, or by replacing half or all of the affected joint, can diminish the risk of fracture to nearly zero.

Any cancer patient with pain in the back, leg, hip, shoulder or arm should be evaluated with a bone scan. If the scan is positive, a CT, MRI or xray should be performed and the patient referred to a medical oncologist, orthopaedic oncologist, or orthopaedic surgeon for evaluation of reinforcement before a fracture occurs. Call 330-344-1980 for patient referral.



REFERENCES

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2. Farid Y, Lin PP, Lewis VO, Yasko AW. Endoprosthetic and allograft-prosthetic composite reconstruction of the proximal femur for bone neoplasms. *Clin Orthop Relat Res*. 2006;442:223-239.
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Physician PROFILE



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Interests:

Orthopaedic oncology (pediatric and
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Other Interests:

Spending time with family,
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