

# Health & Wellness

## Better Treatments for Barrett's Esophagus

**Dr. Anthony Infantolino**

Have you ever experienced heartburn, that sour-tasting, burning sensation in the back of your throat? Maybe you've also had a chronic cough or laryngitis or even nausea? Many people (25-35 percent of American adults) suffer from these symptoms, called gastroesophageal reflux disease (GERD). Treatments range from lifestyle changes to medications to surgery. Left untreated, a serious complication of long-term GERD called Barrett's Esophagus can develop.

Our stomach secretes acid to digest the food we eat. With GERD, stomach contents, including acid, flow back or "reflux" into the esophagus, the swallowing tube that carries food and drink from the mouth to the stomach. Not everyone with GERD develops the condition, but over the long term, in patients with frequent acid reflux, the normal tissue lining the esophagus may be replaced by cells, some precancerous, similar to those in the intestine. This is Barrett's Esophagus. Patients with the malady, when left untreated, increase their risk of esophageal cancer by 50 times or more. This once-rare cancer is the fastest rising cancer in the U.S. and is usually fatal.

Jefferson's Barrett's Esophagus Treatment Center is the third most active center of its kind in the world. We are the first in the Delaware Valley to offer leading-edge therapies like Radiofrequency Ablation (RFA) and



Dr. Infantolino holding an endoscope, used to investigate the upper GI tract and perform life-saving procedures such as RFA.

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part of a pivotal New England Journal of Medicine study that established this treatment as a “standard of care,” sparing 80 to 90 percent of patients from surgery. Less than a decade ago, the standard for treating Barrett’s Esophagus was surgery – an esophagectomy – in which all or part of the esophagus was removed and then reconstructed using another organ, usually the stomach. The risky procedure leaves many patients (30-40 percent) with continuing ill health and profoundly changes the way one eats, sleeps and carries on every day functions. Esophagectomies are performed on patients with lymph node metastasis, but careful screening in cases of Barrett’s Esophagus and early intervention help make the radical procedure unnecessary.

In 1995, when we began experimenting with new ways to treat Barrett’s Esophagus, we used a laser technique called Photodynamic Therapy to kill cancer cells in the esophagus. We then moved to RFA, which sends an electrical charge that “melts” a thin layer of esophageal tissue. The treatment can completely reverse the pre-cancerous changes in the esophagus in 80-90 percent of cases, returning the tissue to normal. In most cases, RFA is performed as an outpatient procedure.

Future discoveries promise even better approaches to screening. We are currently studying the genetic markers in Barrett’s, which will help determine who is at higher risk for esophageal cancer and whether more follow-up is warranted or an RFA should be performed. It’s like looking into a crystal

ball to see into the future of Barrett’s. The Center will be part of a study using a swallowed capsule that opens up to a sponge-like device for screening high-risk patients for Barrett’s Esophagus. We are also experimenting with a high-frequency ultrasound laser to study post-RFA patients to be sure there is no hidden Barrett’s under the surface

Today, Jefferson’s Barrett’s Esophagus Treatment Center is a leader in prevention, management and treatment. About 3.3 million American adults suffer from Barrett’s Esophagus Disease, and the numbers are rising at an alarming rate. At Jefferson, we are fighting back with new knowledge and an innovative spirit for better treatments and even better screening to prevent esophageal cancer.



Anthony Infantolino, MD, AGAF, FACG, FACP is a nationally recognized expert in advanced endoscopic procedures. A particular area of interest over his 25-year career has been Barrett’s esophagus. Dr. Infantolino leads the Jefferson Barrett’s Esophagus Treatment Center and conducts research on early esophageal cancer and advanced technology to diagnose and predict outcomes in Barrett’s. For more information about Barrett’s Esophagus, contact Dr. Infantolino at [anthony.infantolino@jefferson.edu](mailto:anthony.infantolino@jefferson.edu) or 215-955-8900.