

ADVANCED COPD? NEW TREATMENT NOW AVAILABLE AT JUPITER MEDICAL CENTER



For patients with severe chronic obstructive pulmonary disease (COPD), a new treatment at Jupiter Medical Center offers hope for enhanced quality of life and easier breathing when lung medications, steroids, inhalers, and portable oxygen therapy no longer manage a patient's symptoms and breathing difficulties.

Called bronchoscopic lung volume reduction (BLVR) surgery, the technique enables lung specialists to place tiny, one-way valves into diseased portions of the lung so that nearby, healthier lung tissues can function more normally.



"Before these techniques were developed, there weren't a lot of options for patients with advanced COPD," says Dr. Kevin Green, a board-certified pulmonary disease specialist at Jupiter Medical Center's Thoracic Surgery & Lung Center of Excellence. Jupiter's program was pioneered by Dr. Kenneth Fuquay, a pulmonology and sleep medicine specialist.

"This technology is very new, and it's usually done at academic medical centers rather than at community hospitals," points out Dr. Green. "But we've been doing it at Jupiter Medical Center for more than four years."

Before lung reduction volume surgery was available, people with severe COPD usually were treated with inhalers and long-acting bronchodilators to open lung airways, and steroids to reduce inflammation, according to Dr. Green. Many become dependent on portable oxygen, and – until this new procedure became available – those with severe, untreatable disease were offered either a risky lung transplant or comfort-focused palliative measures.

Who Is Eligible?

Patients with advanced COPD must meet key criteria to be eligible for lung reduction surgery. They must:

- Have emphysema that has been diagnosed by a CT scan

- Have specific physical limitations (e.g., inability to walk 100-500 meters (about 350-1,640 feet) without stopping to catch a breath)
- Not be an active smoker
- Undergo specific tests that measure the residual and total capacity of lungs, including diminished ability to exhale and diminished capacity of the lungs to function adequately

Once the lung function tests are complete, the Jupiter lung specialists feed a patient's test results into a StratX protocol, a computerized analysis that generates an algorithm which in turn identifies which portions of the lung are most diseased so that surgeons know where to place the valves.

Once placed into damaged lung tissue, "the valves allow air and mucous to be expelled from the ailing portion of the lung but do not allow air to re-enter, says Dr. Green. "We basically close down the segment of the lung that's not working, allowing the parts of the lung that are working to expand and increase the lung's capacity to handle oxygen and gas exchange."

The procedure does not involve open-chest surgery but is done through flexible endoscopes; a typical procedure takes 60-90 minutes. Most patients stay hospitalized for 3 days for monitoring to ensure adequate oxygen levels and other metrics.

According to the U.S. Centers for Disease Control (CDC), COPD is the sixth-leading cause of death in the U.S., responsible for 142,342 deaths a year.

"It's important for people with COPD who live in the South Florida region to know that there are options for them right here in Jupiter," says Dr. Green. "They no longer have to travel to Orlando, Tampa, or Miami for high-level COPD care."

For more information, please visit
jupitermed.com/services/interventional-pulmonology/