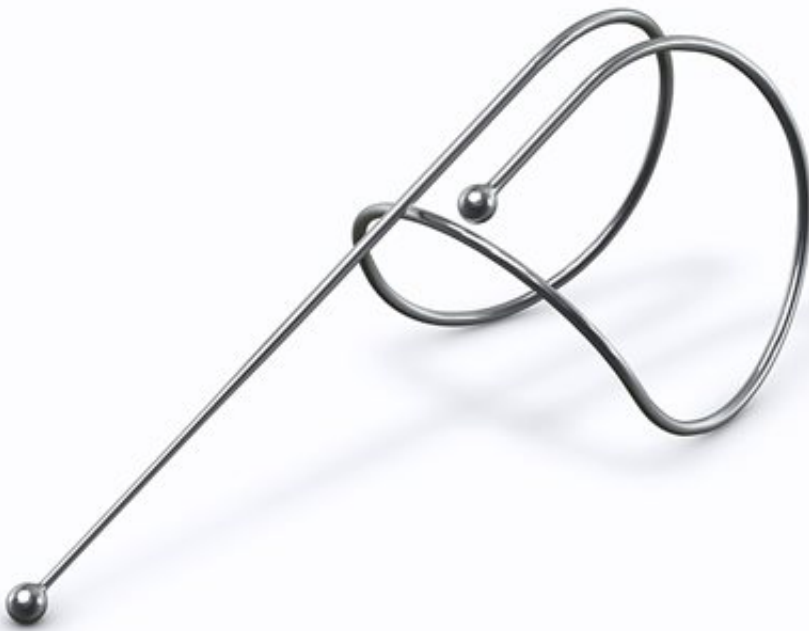


Implanted coils help some lung disease patients, study says

January 12 2016, by Lindsey Tanner



This undated photo provided by BTG PLC shows a rendering of the PneumRx Endobronchial Coil. A novel, minimally invasive way to treat severe breathing problems caused by lung disease showed modest but promising benefits in a small French study. The technique involves inserting several small metal alloy coils through a scope into the lungs, aiming to tighten diseased tissue and open up healthy airways. (BTG PLC via AP)

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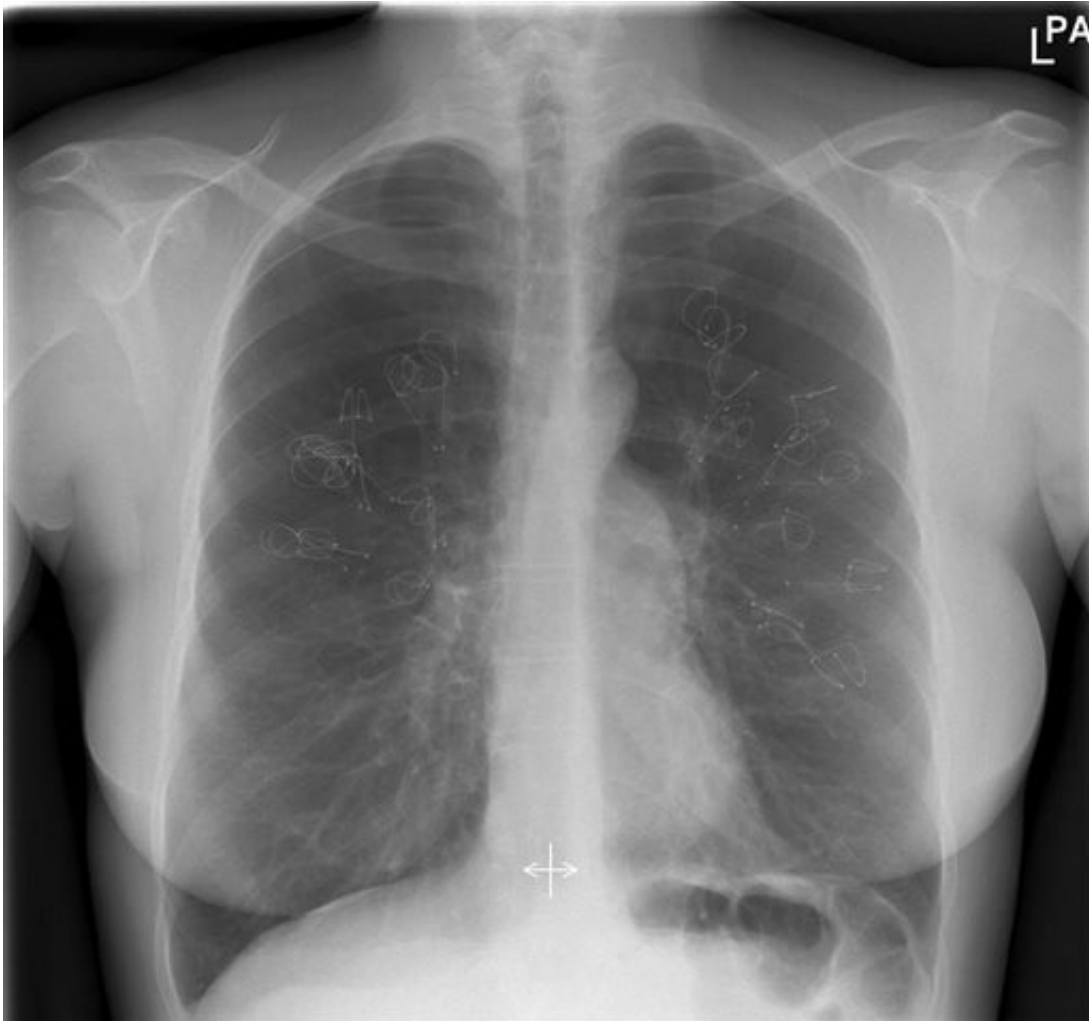
The technique involves inserting several small metal alloy coils through a scope into the lungs, aiming to tighten diseased tissue and open up healthy airways. It's among experimental alternatives to major lung-reduction surgery for patients with emphysema, a common feature of chronic [obstructive pulmonary disease](#), or COPD.

The treatment helped patients to walk further and reduced symptoms including coughing and breathlessness, the French researchers reported. The coil manufacturer, London-based BTG PLC, announced similar benefits last month in preliminary results from a U.S. study.

The French results suggest that coil treatment may provide real benefits for a select group but won't work for many COPD patients, said Dr. Ravi Kalhan, a Northwestern University lung specialist who was involved in the U.S. study.

"Every little increment of something that could work in COPD is significant. There are a lot of people with this disease," Kalhan said.

COPD, which includes emphysema and chronic bronchitis, causes normally elastic airways to stiffen and sometimes swell. It affects 65 million people worldwide, including at least 15 million mostly older Americans, and is a leading cause of death and disability. Patients often have difficulty climbing stairs, showering or even dressing without feeling out of breath.



This undated photo provided by BTG PLC, depicts an X-ray of lungs following the PneumRx Endobronchial Coil treatment procedure. A novel, minimally invasive way to treat severe breathing problems caused by lung disease showed modest but promising benefits in a small French study. The technique involves inserting several small metal alloy coils through a scope into the lungs, aiming to tighten diseased tissue and open up healthy airways. (BTG PLC via AP)

Usual treatment may include inhaled medicine, often steroids, exercise, breathing assistance with portable oxygen tanks, or sometimes major surgery to removed diseased lung tissue.

Implanted coils and valves, another [minimally invasive treatment](#), are used abroad but are considered experimental in the United States.

Results from the study were published Tuesday in the *Journal of the American Medical Association*. The French health ministry paid for the study. Two of the researchers reported involvement in previous research funded by the coil maker, along with travel and speaker fees.

The study involved 100 patients randomly assigned to receive usual care or coil treatment at 10 hospitals in France. Coil patients each got about 20 of the devices. The coils are a few inches long outstretched but spring into a circular shape in the lungs.

After six months, patients were given a six-minute walking test to see they could walk at least 59 yards (54 meters) farther than they did at the start. Only 18 coil patients achieved the goal, but that was twice as many as in the usual treatment group.

At six months, coil patients could walk on average 23 yards (21 meters) farther than the other group. Their scores on a questionnaire about symptoms and quality of life were also better than the other group, although that wasn't the study's main measure.

Kalhan said self-reports on symptom improvement could reflect limitations of the study design—patients knew they'd gotten experimental treatment rather than usual care and wanted to feel better, so it could have been a placebo effect.

More patients got pneumonia in the coil group, and four died, versus three deaths in the other patients, but the study authors said there were far fewer complications than COPD [patients](#) often face with lung reduction surgery.

The researchers and others said more studies are needed to determine long-term outcomes.

"These are folks who are probably going to live still many years in many cases," said Dr. Frank Sciurba, a University of Pittsburgh [lung disease](#) specialist who wrote a JAMA editorial. While coil [treatment](#) was costlier than usual therapy, long-term quality of life improvements would help balance the monetary costs, he said. Sciurba has received research funding from the [coil](#) maker.

"We don't have anything else to offer these folks," he said. "These are really symptomatic, suffering people."

More information: Study: bit.ly/1IZeo5m

COPD: tinyurl.com/jrnde5x

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