# Double threat: Deadly lung disease also linked to heart attacks

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Patients with idiopathic pulmonary fibrosis (IPF) are three times as likely to experience severe coronary events—including heart attacks—than people without the disease, according to a recent study that analyzed the risk of cardiovascular disease in nearly 1,000 patients with IPF and more than 3,500 matched controls.

"If you look at them over time, people with IPF have roughly a three-fold increased risk of acute coronary syndrome, which is a greater increase than you get from smoking," said Richard B. Hubbard, M.D., British Lung Foundation professor of epidemiology at the University of Nottingham and lead author of the study.

The study was published in the second issue for December of the American Thoracic Society's *American Journal of Respiratory and Critical Care Medicine*.

Dr. Hubbard and colleagues analyzed data from the computerized records of the UK's Health Improvement Network for 920 patients with idiopathic pulmonary fibrosis and 3,593 control subjects without IPF for diagnoses of coronary events and disease incidence.

In addition to having a markedly increased risk of heart problems, patients with IPF were 23 percent more likely to have angina, had a 60 percent higher risk of stroke, and a three-fold increased risk of deep vein thrombosis, according to Dr. Hubbard.

Notably, those with IPF were more than twice as likely as control subjects to have been prescribed amiodarone, a medication used for irregular heartbeats that has also been implicated as a cause of fibrotic lung disease.

This research could have serious implications for the 60,000 people with IPF who currently live in the United States and the 21,000 people who receive this diagnosis for the first time each year. Median survival from the time of diagnosis is about three years, and there are currently no treatments that have been shown to increase survival.

Unfortunately, medical knowledge about IPF is limited. "We know that genetic factors play some role in IPF because it clusters in families in about 10 percent of cases— and in a similar number of people there is evidence that environmental factors, such as exposure to metal dust at work and cigarette smoking may have a role," said Dr. Hubbard. "[But] studies from the U.S.A. and the U.K. suggest that IPF is becoming more common, and the reasons for this are unclear."

"Future investigations are required to better understand the relationship between IPF and systemic vascular disease as well as the mechanisms shared by the two syndromes," wrote David Zisman, M.D., and Steven Kawut, M.D., in an editorial in the same issue of the journal. "*f a causal association were confirmed… the presence of IPF itself could constitute a sufficiently potent risk factor for coronary artery disease such that more aggressive goals in risk factor modification would be warranted."*

*Such a mysterious disease as IPF raises a host of questions, but the most pressing ones are about how to improve and extend the lives of its victims.*

*"People with IPF have got a very bad outlook, and we may need to focus on other aspects of their health. The current guidelines are focused on palliative care so that people get oxygen and their symptoms treated, but*

*maybe patients should go on heart prevention treatments right away," Dr. Hubbard said. "Future strategies could include a trial of anti-coagulant therapy in IPF patients," he added.*

*John Heffner, M.D., past president of the ATS, commented that this study introduces a change in our thinking of IPF. "As with other chronic, progressive respiratory disorders, the lungs in IPF may be the bellwether of other more systemic pathogenic events. What is first expressed in the lung becomes manifest later in other organ systems. This perspective will both realign research efforts and also direct more comprehensive healthcare to patients diagnosed with early IPF."*

*Source: American Thoracic Society*