

Bronchial thermoplasty shows long-term effectiveness for asthma

December 2 2013

The beneficial effects of bronchial thermoplasty, a non-pharmacologic treatment for asthma, last at least five years, according to researchers at National Jewish Health and other institutions. The therapy, in which heat is applied to a patient's airways during a bronchoscopy procedure, was approved by the U.S. Food and Drug Administration in April 2010. Among other criteria, the researchers report in the December issue of the *Journal of Allergy and Clinical Immunology* that reductions in severe asthma exacerbations, emergency department visits, medication use and missed workdays continued out to five years after the procedure was performed.

"These data add to the growing body of evidence that bronchial thermoplasty has a long-term benefit and is an important option for patients whose moderate to [severe asthma](#) is not controlled by medications," said Michael Wechsler, MD, lead author of the study and professor of medicine at National Jewish Health.

During bronchial thermoplasty a physician uses a specialized bronchoscope to apply radio frequency energy to heat the airways. The treatment is done in three separate procedures approximately three weeks apart, and reduces smooth muscle surrounding the airways, which can constrict and reduce airflow in asthma.

Earlier research showed that most patients who underwent bronchial thermoplasty in the AIR2 trial experienced benefits for at least two years. The current study extends that to five years.

In the year before bronchial thermoplasty, 52 percent of patients suffered severe exacerbations of their asthma. That dropped to 31 percent in the first year following the treatment and averaged 29 percent over the five years following the procedure.

After bronchial thermoplasty 78 percent fewer patients made visits to the [emergency department](#), dropping from about 30 percent of [patients](#) to less than 7 percent.

Missed workdays dropped 66 percent in the five years after bronchial thermoplasty. Average use of corticosteroid medications also dropped 17 percent.

Stable rates of respiratory adverse events and respiratory-related hospitalizations as well as unchanged CT scans in years two through five indicated that there were no significant safety concerns with the procedure.

Provided by National Jewish Health

Citation: Bronchial thermoplasty shows long-term effectiveness for asthma (2013, December 2) retrieved 7 May 2024 from

<https://medicalxpress.com/news/2013-12-bronchial-thermoplasty-long-term-effectiveness-asthma.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--