

have been advised by their physician or other health care professional to quit, or have social support for quitting.

#### AVOIDING RELAPSES

Smoking seems to operate on an "all or none" principle: "slips" are likely to lead to full-blown resumption of the addiction. Relapses are most likely to occur during negative emotional states. Nearly all ex-smokers have "relapse crises" at some time during the first few months. Those who have developed some type of cognitive or behavioral coping skills for dealing with the temptation to smoke are much more likely to survive these crises.

#### HELPING SMOKERS QUIT

The smoker must select a date to quit. A number of behavioral techniques prepare the person, including reducing overall smoking, not smoking in certain situations, altering the behavior patterns associated with smoking, and beginning to devise a strategy for coping with the desires to smoke. On the day of quitting and for the following 2 weeks the person must discard all cigarettes, spend as much time as possible with nonsmoking people in nonsmoking situations, cope with the desires to smoke without substituting highly caloric food, and use specific techniques for coping with the urges to smoke. In addition, developing or increasing a regular exercise program is quite important.

After 2 weeks the person can return to a normal routine (ie, stop avoiding "high-risk" situations). But vigilance is important, especially in stressful or unusual situations. When the desire to smoke returns—and it will—it is important for the ex-smoker to have one or more coping strategies ready.

Some smokers will require some type of formal smoking cessation program that emphasizes behavioral techniques and provides group interaction and mutual support. Hypnosis may be useful, especially in the early stages of cessation. Nicotine replacement therapies—nicotine chewing gum or the transdermal nicotine patch—may help the heavily addicted smoker. The nicotine patch offers some significant advantages over nicotine gum; it is more pleasant to use, proper dosage is more easily achieved, and it produces fewer side effects. But the nicotine patch is not demonstrably better than placebo unless it is used in a behavior-oriented smoking cessation program.

Perhaps the most important advice one can give the smoker is: "if at first you don't succeed, try, try again!" Many people repeatedly fail before they finally quit, but nearly two thirds of those who repeatedly try eventually succeed. Patients need to be encouraged to learn from their experiences and keep trying and to be told they will eventually succeed. When they finally do, they find it feels good to be rid of an expensive, messy addiction that is more and more scorned and that robs them of vigor, health, and, eventually, life itself.

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### GASTROESOPHAGEAL REFLUX DISEASE: AN OVERLOOKED CAUSE OF ASTHMA

**G**ASTROESOPHAGEAL REFLUX is a frequently overlooked cause of asthma, although Osler noted the association a century ago. It can cause a number of other conditions as well: chronic hoarseness, cough, globus sensation, laryngeal cancer, dental problems (erosions), and noncardiac chest pain.

#### CAUSES OF AIRWAY OBSTRUCTION: TWO HYPOTHESES

Two hypotheses may account for the airway obstruction: gastric acid regurgitated into the esophagus might either be aspirated in small amounts, or might stimulate a reflex that produces bronchoconstriction. Conversely, asthma can cause or exacerbate reflux via changes in intrathoracic pressure. In addition, drugs used to treat asthma (theophylline, beta-2 agonists) can decrease lower esophageal sphincter pressure.

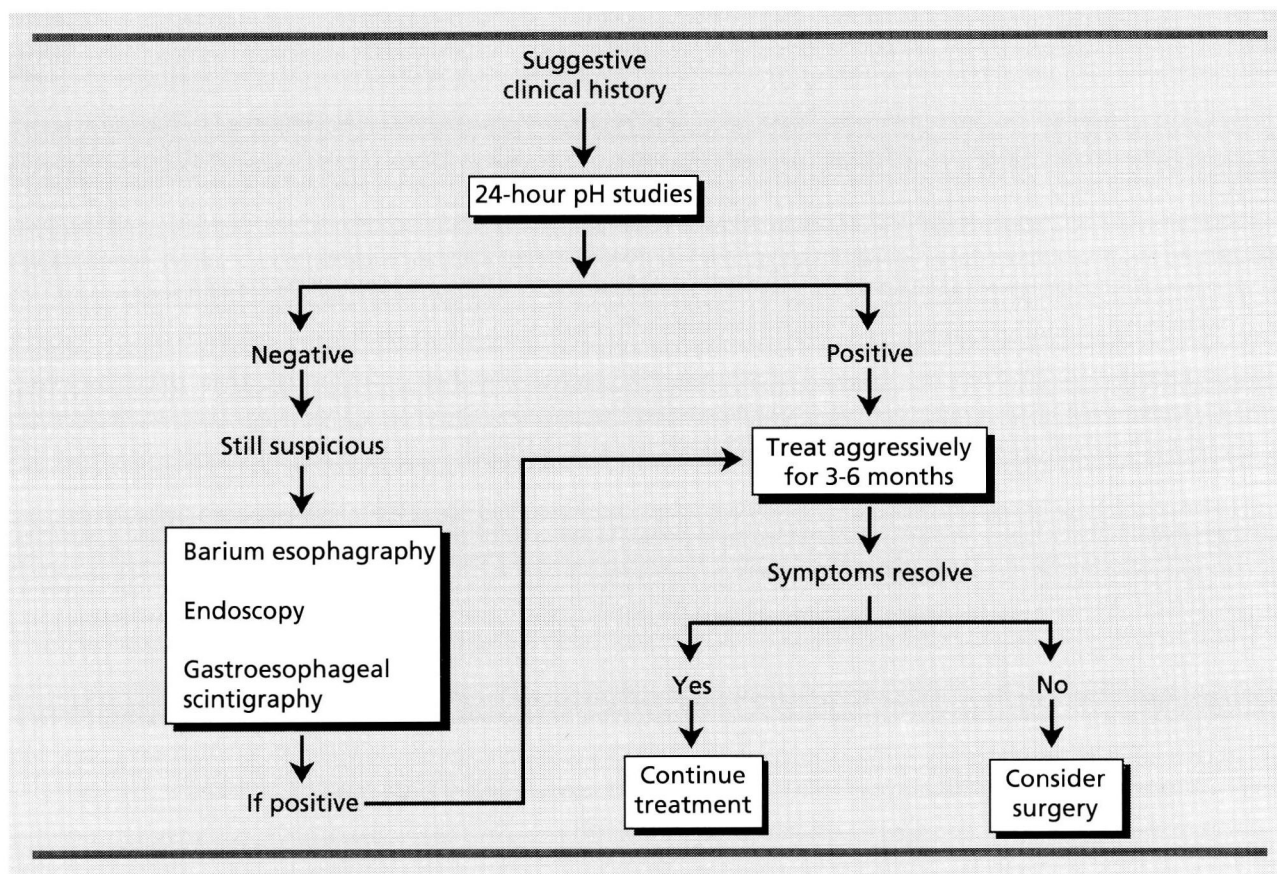


FIGURE. Flow chart for diagnosing and treating asthma caused by gastroesophageal reflux.

#### DIAGNOSTIC MARKERS

Clues in a patient's history that suggest reflux as a cause of asthma are an onset of asthma in adulthood, absence of a family history of asthma, absence of a history of allergies or chronic bronchitis, difficult-to-control asthma, and asthma symptoms that become worse at night, after meals, with aerobic exercise, or after taking bronchodilators. Most patients with asthma caused by reflux do not feel any heartburn, or have only mild symptoms.

#### MONITORING AND TREATMENT

Patients with suggestive symptoms can undergo 24-hour ambulatory esophageal pH monitoring (Figure). More than half of patients with asthma have abnormal amounts of acid reflux. Monitoring can also determine if there is a temporal relationship between the reflux and asthmatic symptoms,

present in 25% of patients. Patients with positive pH study results can undergo a trial of treatment with omeprazole, 20 to 60 mg daily, for 3 to 6 months. (The dosage needs to be higher than for ulcer disease.) If symptoms do not resolve, surgical treatment can cure or improve symptoms in approximately three fourths of patients.

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