ASK DR. BOB . . .

with Dr. Bob Frank

ASTHMA

Should I rate this person for their asthma? This is a question frequently asked by underwriters. While the answer is usually quite clear, there are potentially confusing factors regarding proper risk identification for the individual with asthma. The first source of confusion has to do with the terminology, which is often used inaccurately by both treating physicians and insured individuals. Part of this confusion comes from the misuse of the wastebasket term COPD (chronic obstructive pulmonary disease). As this term implies, this is a group of chronic lung conditions characterized by obstruction to airflow, and can include chronic bronchitis (usually from smoking), emphysema, and bronchiectasis. At times asthma has been included in this grouping. However, most experts in this field would list asthma as a separate category.

Asthma is a common disorder characterized by reversible airflow obstruction, and when obstruction is present you have bronchospasm or wheezing. The exact cause is unknown, but strong evidence suggests an interaction between a genetic predisposition and numerous environmental factors. Asthma has been classified many different ways. Often it is described as being either intrinsic or extrinsic. With the extrinsic type, there is often obvious allergies to various environmental pollutants (such as pollen) while in the intrinsic type there are no obviously apparent allergens. There are several other subsets of asthma, including exercise-induced asthma, cold induced asthma, occupational asthma from exposure to various air pollutants in the work place, and even drug induced asthma. Drug-induced asthma can be caused by prescription medications such as beta-blockers, but also includes many over-the-counter medications including aspirin and the anti-inflammatory medications such as Advil.

The prevalence of asthma has been estimated to be anywhere from 5-15% depending on the locale. There are some areas of the world where asthma is much more prevalent, and other areas where it is not very common. Approximately half of all cases of asthma begin before age 10. There is also a large group of individuals who develop asthma after the onset of age 40. In the childhood onset type of asthma, often the children outgrow their problem by age 20.

In the last 10-15 years, there has developed a new paradigm regarding the pathophysiology of asthma. Years ago it was felt to be a bronchospastic process, in which the smooth muscle of the airways constricted down intermittently, causing the spasm and wheezing. It has now been shown that asthma is an inflammatory disease, with airway inflammation being the common pathway that leads to airway constriction. This inflammation involves various inflammatory cells of the body, inflammatory chemical mediators, and the production of antibodies against certain types of allergens. Understanding this new paradigm of inflammation has helped researchers develop a whole new group of medications to treat this disease.

The classic symptoms of asthma are cough, shortness of breath, wheezing, and chest tightness. It is not unusual for the chest tightness to be mistaken for

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coronary artery disease. It is also not unusual for mild asthma to present as only cough, making the diagnosis somewhat more difficult. The gold standard of diagnosis is pulmonary function testing, in which there is documentation of airflow obstruction, which can be improved with the use of bronchodilator medication.

The treatment of asthma depends on the severity of the disease. In some types of asthma, such as exercise-induced asthma, the symptoms can be controlled simply with the use of an inhaled beta- agonist, which are medications that very quickly reverse bronchoconstriction and open the airways. The effect of this medication is short lived. In most individuals, the symptoms are more chronic and daily, requiring a more aggressive approach to medication. Based upon the new paradigm of asthma, the mainstay of treatment is that of inhaled steroids. The inhaled steroid substantially decreases the ongoing inflammation within the airways, thereby preventing the episodes of wheezing by preventing the inflammation. In more severe cases, oral steroid medication can be used, which may be intermittently used when asthma flairs up or in more severe cases, it may have to be taken on a chronic daily basis.

There has been some concern over the last 20 years that the mortality from asthma is worsening. This has been true in certain areas of the world, but overall this is not the case. Risk factors for asthma deaths include poverty, poor housing conditions, lower education, lack of access to health care, overuse of inhaled bronchodilators, lack of treatment with inhaled steroids, and chronic exposure to various environmental pollutants, including smoking and air pollution. Previous life threatening episodes are the most important single factor that may predict future mortality. If someone has been ill enough to require hospitalization for their asthma, they are at much greater increase risk of a severe occurence and death in the next one year. The ongoing use of cigarettes is the next most important factor in determining mortality. Obviously, anyone with asthma should completely refrain from all smoking. The use of peak expiratory flow meters by individuals has helped to decrease the frequency of severe episodes. With the peak expiratory flow meter, an individual on a daily basis measures how well they are breathing. They keep a daily record and know what their normal values are on good days. If suddenly the flow meter should show a decrease in their expiration, they can contact their physician and be treated more aggressively over the next several days; often this includes a short burst of oral steroids. This can often stop an episode from becoming much more severe, that could end up requiring hospitalization or be life threatening.

Overall, mortality from asthma is low. Small children, who often cannot express to their parents the severity of their problem or use the peak expiratory flow meters, can be at increased risk. However, the majority of deaths occur after the age of 45, with 40% of those occuring in those over 75 years old. In addition to factors previously listed as predicting mortality, mortality is also increased when there are other co-morbid conditions present. This includes obesity, diabetes, and coronary artery disease. Most individuals with asthma can be issued standard policies, and many even qualify for preferred rates. Mild ratings may have to be applied to individuals who have more chronic and severe symptoms; often these individuals require daily oral steroids. If an individual has recently had a life-threatening episode, the case may require postponing for a year or so until the disease can be brought under better control. The other factor the underwriters pay close attention to is the individual's ongoing compliance with their medication and the use of their expiratory flow meters.

Overall, an agent can be optimistic when taking an application from a person with asthma that the case will be issued favorably. Adequate information from the attending physician is of paramount importance in the risk classification process. As usual, I am happy to discuss this information with any of our field associates. I can be reached at ext. 2641.