

## Allergy Testing Brandon

Allergy Testing Brandon - The term asthma is derived from the Greek language and translates to "panting." It is a chronic inflammatory disease of the airways. Asthma is characterized by recurring and variable signs, consisting of bronchospasm and reversible airflow obstruction. Indications of asthma comprise: wheezing, chest tightness, shortness of breath and coughing. Asthma is clinically classified depending upon the frequency of symptoms, peak expiratory flow rate and forced expiratory volume in one second. Asthma could be further categorized as extrinsic or atopic or intrinsic or non-atopic.

Asthma is thought to be caused by a combination of genetic and environmental elements. Treatment of acute indications is often by utilizing an inhaled short-acting beta-2 agonist, for example salbutamol. Those who have asthma try to avoid triggers comprising allergens and irritants. Individuals who suffer from asthma normally find relief by inhaling corticosteroids. Treatments using Leukotriene antagonists are less useful compared to corticosteroids are normally less favored.

Generally, a diagnosis is made based upon the pattern of symptoms in addition to the response to therapy over time. Ever since the 1970s, there has been a considerable increase in asthma. According to statistics of 2010, across the world, more than 300 million individuals are affected worldwide and 250,000 asthma deaths were recorded during 2009. The prognosis for asthma is usually good because of the ability to correctly manage this particular condition through therapy.

### Classification

Asthma is classified according to its severity in patients, the frequency of symptoms, if the indications occur during nighttime, predicted percent of FEV1 and FEV1 variability, how often and intermittent the attacks take place and so on. The asthma may be considered mild persistent if the attacks take place less than twice per week and not each and every day. For example, if they occur 3 to 4 times per month. One more category would be moderate persistent. These attacks can occur once per week but not each and every night. Daily attacks are considered to be severe persistent occurring normally 7 times per week, perhaps several times a day.

Presently, there is no concise way for classifying various subgroups of asthma, even though the condition is classified based on seriousness as listed above. Cases of asthma respond to different treatments. There is still much research ongoing so as to find ways to identify subgroups and which treatments respond well.

Asthma is not classed as a chronic obstructive pulmonary diseases, although this particular disease is a chronic obstructive condition. Chronic obstructive pulmonary disease include bronchiectasis, emphysema and chronic bronchitis for example. These diseases are irreversible. In asthma, the airway obstruction is reversible, however, if not treated, the chronic lung inflammation during asthma can become an irreversible obstruction due to airway remodeling. Asthma also affects the bronchi and not the alveoli as in emphysema.

### Asthma Attack

Asthma attacks are usually defined as an acute asthma exacerbation. Indications of an asthma attack comprises: wheezing, chest tightness and shortness of breath, though some people present mainly with coughing. In some cases, are motion may be impaired so greatly that no wheezing is heard. During an attack, there may be a paradoxical pulse, which means a pulse which is weaker during inhalation and stronger during exhalation. The individual may have a blue tinge to their nails and skin resulting from lack of oxygen. Certain neck muscles like for example the sternocleidomastoid and scalene muscles may become more pronounced as the person struggles for air.

In a mild exacerbation the peak expiratory flow rate or likewise known as PEFr is  $\geq 200$  L/min or  $\geq 50\%$  of the predicted best. Moderate is defined as between 80 and 200 L/min or 25% and 50% of the predicted best whereas severe is defined as  $\leq 80$  L/min or  $\leq 25\%$  of the predicted best.

### Exercise Induced

Amongst top athletes, asthma could be induced by exercise. During the Summer Olympic Games held Last 1996 within Atlanta, a study of the athletes showed that 15 percent of athletes had asthma and 10 percent were on asthma medication. The most common sports that have a high incidence of asthma comprise mountain biking, cycling and long-distance running. Diving and weight-lifting show a somewhat lower incidence. There has been evidence suggesting insufficient vitamin D levels are associated with serious asthma attacks. Normally, asthma induced by exercise is treated successfully with the use of a short-acting beta2 agonist.

### Occupational Asthma

Many individuals suffer from asthma as a result of things they are exposed to at their office. This is reported as occupational respiratory disease. Most of cases of occupational asthma are not recognized or reported as such. The highest percentage of cases happened during labourers and fabricators, followed by managerial specialists and professionals as well as individuals in administrative support, technical and sales jobs. The majority of these cases of asthma were in the services and manufacturing industries. Certain reactive chemicals are usually connected with work-related asthma as well as items like enzymes, animal proteins, natural rubber latex and flour. One research reported that 15 to 23 percent of new onset asthma cases which occurred in adults are work related.

### Causes

Asthma is caused by environmental and genetic elements. These issues influence how severe the asthma is as well as how it responds to medication. There have been researches showing associated illnesses such as eczema and hay fever are related. The strongest risk factor for developing asthma is a history of atopic disease. The more allergens one reacts to on a skin test, the higher the possibilities of them having asthma.

Much of the allergic reactions to asthma is likewise related with sensitivities to indoor allergens. The normal style of housing in the west, would also allow greater exposure to indoor allergens. There have been mixed findings to the prevention studies aimed at the aggressive reduction of airborne allergens inside a home with infants. For instance, strict dust mite restriction has lessened

the chance of allergic sensitization to dust mites and somewhat reduces the possibility of developing asthma until the age of 8. However, similar researches with exposure to dog and cat allergies have shown that exposure during the first year of existence was found to reduce the risk of allergic sensitization and of developing asthma later in life.

There have been researches in the United Kingdom and the United States exploring the connection between the development of asthma and obesity. Various factors connected with obesity may play a part in the pathogenesis of asthma. Like for instance, due to a build-up of fatty or adipose tissue, a decreased respiratory function could occur. This may be partly because adipose tissue contributes to a pro-inflammatory state and this has been connected with non-eosinophilic asthma. Adult onset asthma has also been linked with Churg-Strauss syndrome and periocular xanthogranulomas.