



ISNS Case Study

Bronchial Asthma

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Asthma is categorized as a chronic inflammatory disease and is one of the most common lung conditions affecting children, adolescents and adults with more than 24 million people in the United States diagnosed with it. Asthma occurs because the airways that carry air into and out of the lungs become inflamed, irritated, and narrowed. Due to this, the muscles surrounding the airways tighten up and the cells in the airway begin producing more mucus than usual. This disease is caused by failure of the respiratory and immune systems to develop normally. The symptoms include wheezing, coughing, shortness of breath, and chest tightness. This disease is more often seen in children, but regression can occur with age with up to one-third of children becoming disease free in young adulthood.

The most common factors for developing asthma are having a parent with asthma, having a severe respiratory infection as a child, having an allergic condition, or being exposed to certain chemical irritants or industrial dust in the workplace. Scientists continue to explore what causes asthma but we do know that these factors play an important role in the development of asthma. If you have a parent with asthma, you are three to six times more likely to develop asthma than someone who does not have a parent with asthma. Some people are more likely to develop allergies than others, especially if one of their parents has allergies. Certain allergic conditions, such as atopic dermatitis (eczema) or allergic rhinitis (hay fever), are linked to people who get asthma. Respiratory problems during infancy and childhood can cause wheezing. Some children who experience viral respiratory infections go on to develop chronic asthma. If you have asthma,

exposure to certain elements in the workplace can cause asthma symptoms. For some people, exposure to certain dusts (industrial or wood dusts), chemical fumes and vapors, and molds can cause asthma to develop for the first time. Cigarette smoke irritates the airways. Smokers have a high risk of asthma. Those whose mothers smoked during pregnancy or who were exposed to secondhand smoke are also more likely to have asthma. exposure to the main component of smog (ozone) raises the risk for asthma. Those who grew up or live in urban areas have a higher risk for asthma. Children and adults who are overweight or obese are at a greater risk of developing asthma. Although the reasons are unclear, some experts point to low-grade inflammation in the body that occurs with extra weight. Obese patients often use more medications, suffer worse symptoms and are less able to control their asthma than patients in a healthy weight range.

Asthma is broken down into types based on the cause and the severity of symptoms. Intermittent asthma comes and goes, and you can feel normal in between asthma flares. Persistent asthma means you have symptoms most of the time. Symptoms can be mild, moderate, or severe. Healthcare providers base asthma severity on how often you have symptoms. They also consider how well you can do things during an attack. Asthma has multiple causes: some people's allergies can cause an asthma attack. Allergens include things like molds, pollens, and pet dander. Outside factors such as exercise, stress, illness and weather can cause asthma to flare up. Asthma can also be adult onset or pediatric. Adult onset asthma starts after the age of 18. Pediatric asthma, also called childhood asthma, often begins before the age of 5, and can occur in infants and toddlers. Children may outgrow asthma. There is also exercise-induced asthma which is triggered by exercise and is also called exercise-induced bronchospasm. Occupational asthma happens primarily to people who work around irritating substances.

Asthma cannot be cured but there are several treatments available. The most common treatment is to use an inhaler, which delivers medication directly to the lungs. Inhalers help control the disease and enable people with asthma to enjoy a normal, active life. There are two main types of inhalers: bronchodilators and steroids. Bronchodilators relax the muscles around the airways. The relaxed muscles let the airways move air. They also let mucus move more easily through the airways. These medicines relieve symptoms when they happen and are used for intermittent and chronic asthma. Steroids such as beclomethasone reduces inflammation in the

air passages, which improves asthma symptoms and reduces the risk of severe asthma attacks and death. People with asthma may need to use their inhaler everyday. Their treatment depends on the frequency of symptoms and the types of inhalers available.

Case Study

Patient: Female

Age: 35-year-old

History: Her father also has asthma.

Symptoms: She has recurrent episodes of coughing, wheezing, chest tightness, and shortness of breath. She reports that these symptoms are often triggered by exposure to allergens, such as pet dander and pollen, as well as physical exertion. An acute attack occurs every 2-3 days. She was diagnosed with asthma six months ago, January of 2023.

Clinical Tests: Pulmonary examination

Respiratory function tests:

e.g: Tiff: 75% (The Tiffeneau index (FEV1/VC%) is the most sensitive parameter of airway narrowing, whose value is over 80% in healthy adults.

Medications: She received asthma education and learned how to monitor her symptoms and use inhalers effectively.

Montelukast - 10 mg

Foster (formoterol and beclomethasone) 100/6 2x2 puffs

Berodual (ipratropium and fenoterol) if necessary 2x2 puffs (rescue medication)

Treatment/Method: She received proprietary blends in addition to conventional medications.

Proprietary Blend I: 2x5 drops, morning and evening, for 3 days, then every 3 days then increased by 1-1 drops every 3 days to 2x10

Proprietary Blend II: 1 in the morning for 7 days, then 1 in the morning and 1 in the afternoon

Proprietary Blend III: 1 sachet in the morning for 7 days then 1 sachet in the morning and 1 sachet in the evening

Proprietary Blend IV: 1/2 teaspoon in the morning

Proprietary Blend VI: 1 in the morning and 1 in the evening

Additional treatment: Exercises to achieve a positive mental and emotional state (e.g: yoga, meditation, breathing exercises, and stress management.)

LEGEND:

Proprietary blend I: silica, vitamin c, and trace minerals.

Proprietary blend II: N-acetyl L-tyrosine, anhydrous caffeine, L-theanine, velvet bean seed, pine bark, curcumin, and vitamin d.

Proprietary blend III: black seed oil, resveratrol, turmeric, raspberry ketone, apple cider vinegar, aloe Vera, and d-ribose

Proprietary blend IV: Vitamin C, Zinc sulfate, and Vitamin D3.

Proprietary blend V: Inulin, Green Banana Flour, Apple Fiber, Bacillus Coagulans, Spirulina, Wheat Grass, Barley Grass, Alfalfa Leaf, Flaxseed, Psyllium Husk Powder, Chlorella, Broccoli, Kale, Spinach, Green Cabbage, Parsley, Aloe Vera, Cayenne Pepper, Blueberry Powder, Pomegranate Seed Powder, and MCT Coconut Oil Powder

Proprietary blend VI: B-Nicotinamide Adenine Dinucleotide (NAD+), magnesium, trace minerals, quercetin, vitamin D, vitamin C, and vitamin K2

Results: After 1 month of treatment: the intensity of symptoms has decreased (coughing, wheezing, chest tightness, and shortness of breath). Acute attacks improved from 2-3 per week to only one per week.

After 2 months: Her symptoms continued to improve significantly. She did not have any acute attack in the second month. She did not need the emergency medication. She was able to participate in physical activities without significant limitations.

Control Respiratory Function Test: Tiff improved from 75% to 89%

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