

What is Asthma?

Recorded: May 6, 2024

Transcript

[0:00 Introduction]

Here's what you need to know about asthma. I'm Dr. Imran Satia, a respiratory physician and Assistant Professor in McMaster University's Department of Medicine.

[What is asthma? 0:08]

So, what is asthma? Asthma is a chronic condition that affects the airways in the lungs. These airways become inflamed and narrow, leading to symptoms such as shortness of breath, wheezing, chest tightness and coughing. These symptoms can vary in frequency and

Finally, approximately 5-10% of patients with asthma can develop severe, uncontrolled asthma, which requires biological therapy. Biologics have changed the landscape of asthma treatment by providing options for those who have not found relief with standard therapies. This precision medicine approach has allowed for a more personalized and effective management of asthma. These biologic therapies are a newer class of drugs that target specific molecules or pathways involved in the inflammatory process. They are typically given as injections and are tailored to the individual's specific type of severe asthma. Biologics can significantly reduce the frequency of asthma attacks, improve lung function, and improve day-to-day asthma symptoms. It's important to consult with a healthcare provider to understand if biologic treatments are a suitable option.

[What happens to asthma as you age? 2:51]

The progression and management of asthma can differ notably between those who develop it in early life, and those who experience late-onset asthma. Individuals with early-onset asthma, which typically develops during childhood and is often associated with allergies, may see changes in their condition as they age. Some children may outgrow their symptoms, while others continue to experience them into adulthood. Over time, consistent management and medication can lead to a reduction in overall symptoms. However, the long-term inflammation from chronic asthma can lead to airway remodeling, which might affect lung function and exercise capacity as one ages.

In contrast, late-onset asthma, which appears in adulthood, often has different triggers, such as viruses, workplace irritants, and may be associated with other allergic conditions. It's generally considered to be more persistent and less responsive to treatment than early-onset asthma, and often requires biological therapy. Late-onset asthma can also be more severe and is often misdiagnosed due to the similarity of symptoms to other respiratory conditions that are more common in older adults, like chronic obstructive pulmonary disease, also known as COPD.

For both early and late-onset asthma, the aging process can introduce further complexity. The immune system changes with age, potentially leading to a higher susceptibility to infections and, thus, more asthma attacks. Additionally, the medications used may require adjustments, as the body's response to certain drugs can evolve over time. For late-onset asthma, other medical conditions, such as heart disease, are more common and may influence both the treatment strategy and the overall management of asthma. Older adults are more likely to experience side effects or interactions with other medications they may be taking for various age-related health