

Family Medicine Clerkship Plain Language Summary Project

Title: Tylenol may increase the risk of asthma in children

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Plain Language Summary:

What is Tylenol and what is it used for?

Tylenol, also known as acetaminophen, is a drug that can be used to reduce fever, pain, and inflammation, which are common symptoms a person can experience when his or her body's immune system is actively fighting against illness.

What are the side-effects of Tylenol?

Some side-effects that can be caused by Tylenol include skin reaction (redness and itchiness), swelling of face, throat, tongue, lips, eyes, hands and legs, difficulty breathing or swallowing. Taking too much of it at once may also damage your liver. There is growing number of scientific studies that suggest that acetaminophen can be related to increased risk of asthma or wheezing.

What is asthma?

Asthma is a disease that causes the airways in the lungs to swell and narrow (Figure 1), thereby leading to difficulty breathing, chest tightness and coughing. Asthma can be triggered by many things, including animals, dust, chemicals, exercise, mold, pollen, common cold, stress, and smoking. It can be treated by drugs that reduce inflammation or widen your airways.

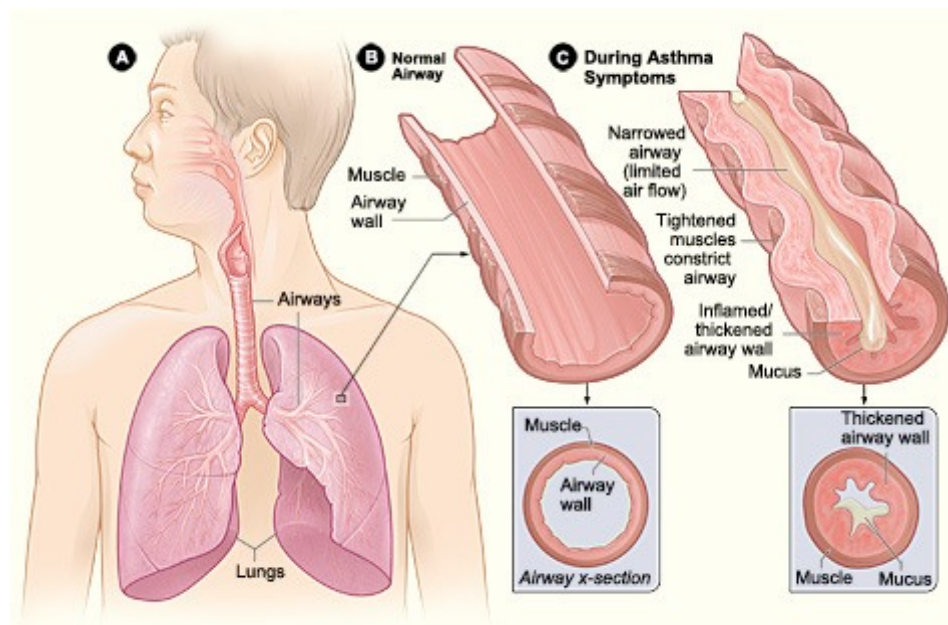


Figure 1: Asthma is a disease that causes the airways in the lungs to swell and narrow. (Image obtained from National Heart Lung and Blood Institute: <http://www.nhlbi.nih.gov/health/health-topics/topics/asthma/>)

Tylenol and asthma:

There is increasing number of evidence that shows Tylenol may be related to asthma. However, most of the studies done so far have been observational, which are done by reviewing patient's medication list and history. These types of studies cannot prove that Tylenol directly causes asthma. Many medical doctors are now recommending that kids with history of asthma or risk of developing asthma (e.g. family history) to avoid taking Tylenol. More scientific studies will be required to confirm whether Tylenol can cause asthma. Please let your doctors know if your kids have asthma, symptoms of asthma or family history of asthma so that they can make a better drug choice when they are treating your kids.

Additional Resources:

To find out more about Tylenol, please go to:

Acetaminophen: National Institute of Health

<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0000521/>

To find out more about asthma, please go to: Asthma:

National Institute of Health

<http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001196/>

To find out more Tylenol exposure and asthma, please go to: WebMD: [Asthma and](http://blogs.webmd.com/childrens-health/2012/03/asthma-and-acetaminophen-is-there-a-connection.html)

[Acetaminophen: Is There a Connection?](http://blogs.webmd.com/childrens-health/2012/03/asthma-and-acetaminophen-is-there-a-connection.html) <http://blogs.webmd.com/childrens-health/2012/03/asthma-and-acetaminophen-is-there-a-connection.html>

Key Words:

Acetaminophen

Tylenol

Asthma

Wheezing

Fever

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