

Asthma and dust mites

BY JOHN LEUNG, MD

One in five Asian immigrant children has asthma. In allergic asthmatics, effective avoidance of allergens can improve symptoms and may reduce the use of medications. The first step is to identify the specific allergens that trigger one's asthma symptoms. This is usually done by blood testing or skin testing performed by a certified allergist.

Major indoor allergens include dust mites, cats, dogs and cockroaches. Today, we will discuss how to avoid dust mites effectively in allergic individuals. Dust mites are arthropods.

They look scary but they do not bite. They are very small and you cannot see them with the naked eye. They feed on moisture from the air and shed human skin. They live in pillows, mattresses, box springs, comforters and any woven materials, where there is plenty of food (shed human skin). It is their feces that cause the allergic reaction. Their feces are relatively heavy and normally are not airborne, thus air purifier is not helpful in removing them.

Here are some tips for effective dust mite avoidance:

1) Encase pillows, comforters and mattresses with special dust-mite proof covers. Regular bedding covers do not work because their large pore sizes allows free passage of dust mites.

2) Wash sheets, pillowcases, mattress pads and blankets weekly in hot water with detergent, and dry them in an electric dryer on a hot setting, to

kill the dust mites.

3) Minimize the number of stuffed toys in your children's bedrooms. They are havens for dust mites.

4) Decrease humidity by opening windows in a dry climate, or air conditioning in a humid climate. Dust mites feed on moisture and they cannot survive a dry environment.

5) Remove carpets or rugs from the bedroom if possible. If not, vacuum at least weekly using a vacuum equipped with a high-efficiency particulate air (HEPA) filter.

6) Replace upholstered furniture and drapes.

Don't expect immediate results. It takes at least three to six months to see gradual improvement of symptoms. Remember, dust mite avoidance only works in asthmatics who are allergic to dust mites, and other allergens can also trigger asthma. Work with your allergist to find out what specific allergens are triggering your asthma. Asthma is a complex disease and allergen avoidance is only one of the four components in fighting asthma. Other key components include medications, patient education and routine monitoring by your doctor. Stay tuned, we will discuss these topics in upcoming issues.

If you have any questions about asthma, you can email Dr. Leung at drjohnleung@gmail.com.

Dr. John Leung is triple-board certified in internal medicine, allergy/im-



A dust mite. (Image courtesy of Flickr user arkhangellohim.)

munology and gastroenterology. He is the Director of the Food Allergy Center at Tufts Medical Center.

Tufts Medical Center



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哮喘與塵埃

梁爾尊醫師撰寫

在美國，每五位亞裔孩子中，就有一位患有哮喘。對於過敏性哮喘，有效地避免過敏原不但能夠改善患者的哮喘症狀，也能幫助其減少藥物的使用。想要改善哮喘症狀，第一步要做的就是確切找出誘發患者哮喘的過敏原為何，而經認證的過敏症專治醫師通常可以透過血液測試或皮膚測試找出過敏原。

室內最常見的過敏原是塵蟎、貓、狗和蟑螂。接下來，我們就要來看看如何有效地幫助過敏患者避免塵蟎。

塵蟎是種節肢動物，外形嚇人，但卻不會咬人，且體積極小，我們用肉眼是看不到牠們的。塵蟎是靠著空氣中的濕氣與人體脫落的皮膚得以存活，常住在我們的枕頭、床墊、彈簧墊、抱枕以及任何紡織物品中，因為在這些地方，塵蟎可以大量取得所需的食物（也就是我們脫落的皮膚）。確切來說，塵蟎的排泄物才是引起過敏反應的元凶。塵蟎排泄物的重量相對較重，一般狀況下是不會在空氣中傳播，因此，空氣淨化器對於消除塵蟎的排泄物毫無幫助。

為幫助您有效地避免塵蟎，我們提供了以下方法：

1) 將您家中的枕頭、抱枕、床墊都套上特製的防塵蟎套。一般的枕頭套或床套在防塵蟎一事上作用不大，因為一般紡織品的細孔較大，塵蟎仍可以自由進出。

2) 每週定期用熱水清洗床單、枕頭套、床墊、床毯等，並放入烘乾機加熱烘乾，以除滅可能存在的塵蟎。

3) 盡量減少孩子房間裡絨毛玩具的數量，絨毛物品是塵蟎滋生的天堂。

4) 為降低空氣中的濕度，天氣

乾燥時，記得打開窗戶，天氣潮濕時，記得開啟空調。塵蟎仰賴空氣中的濕氣存活，而在乾燥的環境下則無法生存。

5) 若是可行，最好不要在臥房放地毯，如果一定要放地毯的話，記得每週要用高效微粒空氣過濾器（HEPA filter）的吸塵器來清理您的地毯。

6) 避免使用鋪棉材質的傢俱或窗簾。

在對抗哮喘的路上，別期望見到立竿見影的功效，一般最少是需要三至六個月的時間哮喘症狀才會漸漸好轉。需要注意的是，並不是所有的哮喘患者的過敏原都是塵蟎，另有其他的過敏原也會誘發哮喘，而只有對於過敏原是塵蟎的患者，利用避免塵蟎一法來控制哮喘症狀才會見效。您可以與過敏症專治醫師合作，一同來找出究竟什麼是誘發您哮喘的過敏原。哮喘這種疾病相當複雜，而避免過敏原只是對抗哮喘四步的其中之一，另外三步還包括藥物控制、患者教育以及醫生的定期追蹤。請持續關注此系列專欄，我們接下來還會探討哮喘的相關話題。

若您對哮喘有任何疑問，歡迎聯繫梁醫師，電子郵件為 dr.johnleung@gmail.com。

梁爾尊是內科、過敏/免疫學、腸胃科等三專科認證醫師，現為塔芙茨醫療中心之食物過敏中心主任。

一文章由譚詠璇翻譯