



The Association Between Environmental Factors And Asthma



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Introduction

- Asthma is a disease that affects the airways that carry air to and from your lungs.
- It is characterized by inflammation of the bronchial tubes with increased production of sticky secretions inside the tubes.
- The inflammation makes the airways extremely sensitive to irritations and increases susceptibility to allergic reaction.[1]

Pathogenesis

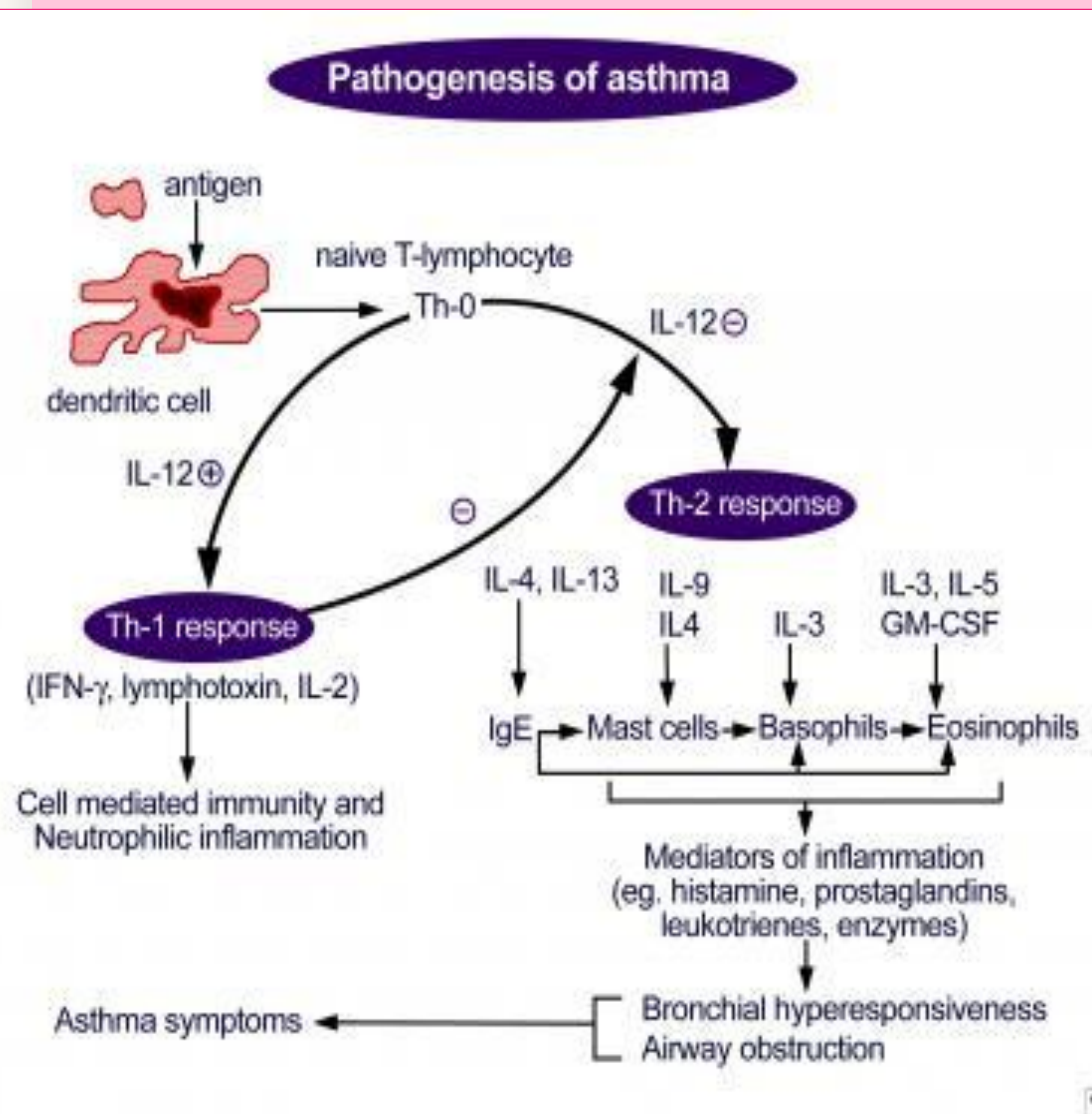


Figure1 shows the pathogenesis of asthma. [2]

Causes

It isn't clear why some people get asthma and others don't, but it's probably due to a combination of environmental and genetic (inherited) factors.

- Airborne substances, such as pollen, dust mites, mold spores, pet dander or particles of cockroach waste
- Respiratory infections, such as the common cold
- Physical activity (exercise-induced asthma)
- Cold air
- Air pollutants and irritants, such as smoke
- Certain medications, including beta blockers, aspirin, ibuprofen (Advil, Motrin IB, others) and naproxen (Aleve)
- Strong emotions and stress
- Sulfites and preservatives added to some types of foods and beverages, Gastroesophageal reflux disease (GERD).(Fig2) [3]

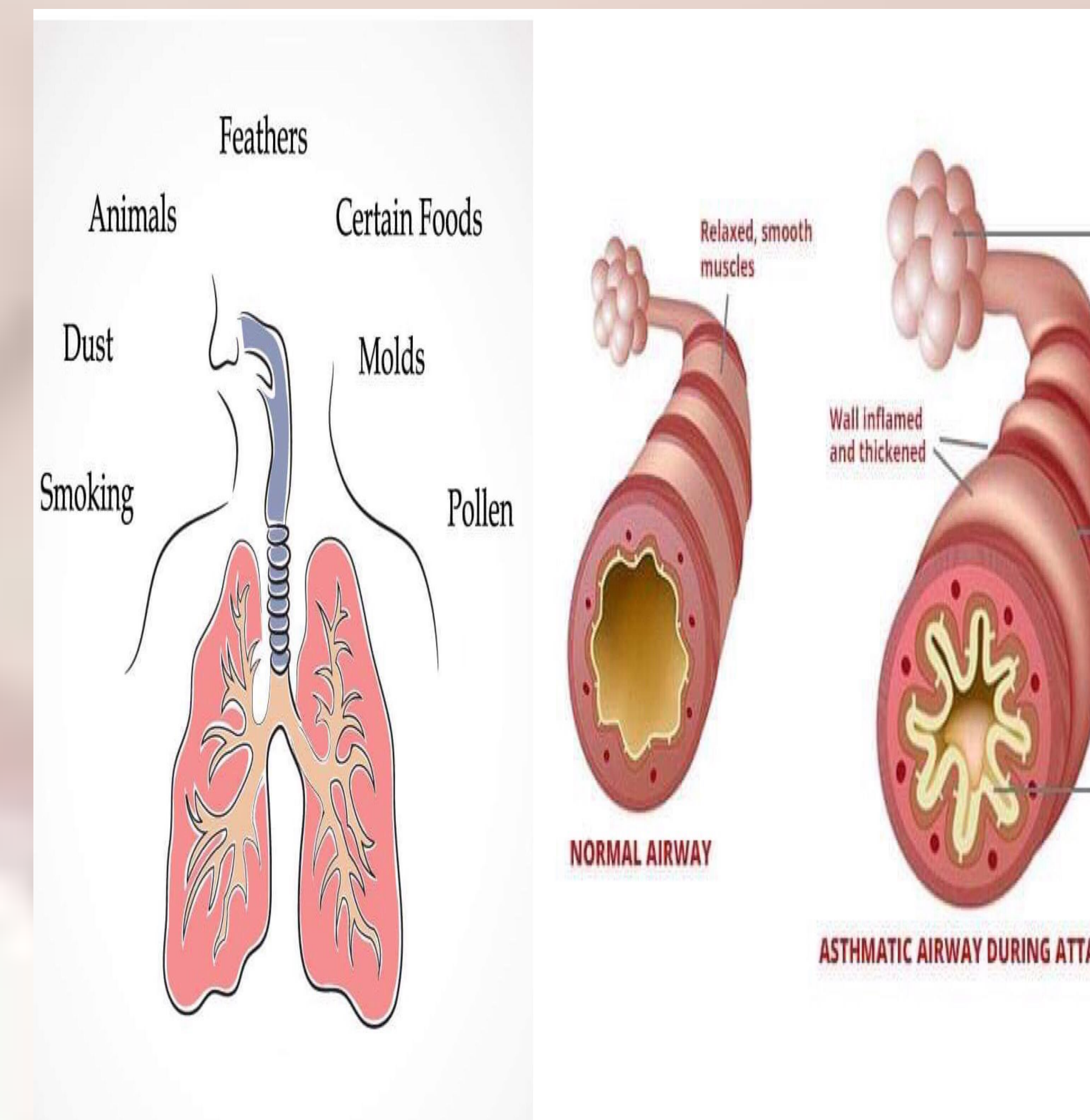


Figure 2 shows the causes of asthma

Asthma related with environment

Work-related asthma, is asthma that can be caused or triggered by conditions or substances in the workplace.

In California, estimates indicate that 137,000 to 315,000 adults have asthma related to their work environment.

Currently, there are approximately 350 substances known to cause new onset asthma in the work place.[4]

Conclusion

- asthma can be described as a chronic respiratory condition which can be identified by breathing difficulty, wheezing, cough and chest tightness. Narrowing and swelling of the airways and increased mucus production are the major episodes looked for to establish an asthma condition.
- The pathophysiology of asthma is complex and involves airway inflammation.

References

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