



# Allergy Alert

*A case-based update*

## “I can’t stand this smell!”

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### *Notes on Deborah*

*Age:* 35

*Presentation:* Presents concerned she is allergic to various chemical smells.

- ✓ Over the past year and a half, has had symptoms of chest tightness, shortness of breath, lightheadedness, dizziness and mental confusion, which have now progressed to weakness, shaking, sweating, palpitations, nausea, and occasional numbness and swelling of lips and fingers.
- ✓ Precipitating factors include perfumes, cologne, potpourri, scented candles, solvents, cleaning agents, cigarette smoke and vehicle exhaust.
- ✓ Patient no longer goes into certain stores if scented products are present and has discontinued wearing scented items.
- ✓ Often has to leave her home for several hours while the cleaning is completed.
- ✓ Has difficulty going on subways because of proximity to individuals wearing scented products and in traffic due to exposure to vehicle exhaust.
- ✓ Past history is remarkable for an episode of depression in her 20s.
- ✓ Is not taking any medication and has no known drug allergies.
- ✓ Increasing levels of stressors over the past year due to marriage difficulties and financial concerns; has mood swings and increased irritability.
- ✓ Has been sleeping poorly; often wakes early and finds sleep is not refreshing.
- ✓ At work, attributes symptoms to “off gassing” from magic markers and scented products used by students and colleagues; has refused to work in a particular classroom because she believes the new carpet is “off gassing.”
- ✓ Some of her colleagues have reported similar symptoms; a few of these individuals been told they are allergic to various chemicals, foods and electromagnetic radiation.
- ✓ Is otherwise well and physical exam is unremarkable.

*What do you suspect?*


*Differential diagnosis:*

- ✓ Asthma with response to minor airborne irritants.
- ✓ Panic attacks triggered by psychologically conditioned olfactory stimuli (smells).
- ✓ Although asthma would not explain all of this patient's symptoms, it should be considered as potentially contributing to some of her symptoms.
- ✓ Routine blood work excludes other contributing conditions, such as thyroid disease and hypercalcemia.

*Further investigations:*

- ✓ The patient is referred to an allergist for further investigation.
- ✓ She undergoes allergy skin prick testing to exclude the possibility of sensitization to aeroallergens; results are all negative.
- ✓ Complete pulmonary function testing, including a methacholine challenge, is normal and excludes a diagnosis of asthma in this case.

*Final diagnosis:**Panic attacks triggered by psychologically conditioned olfactory stimuli*

- ✓ The patient is referred to a psychiatrist, who confirms the presence of panic attacks.
- ✓ The panic attacks are triggered by psychologically conditioned olfactory stimuli.
- ✓ In addition to classic symptoms of panic, the patient exhibits anticipatory anxiety and phobic avoidance of her purported triggers.
- ✓ She undergoes stress management counselling, relaxation training and is treated with a serotonin reuptake inhibitor.
- ✓ Once symptoms are under control, she undergoes psychologic desensitization, consisting of controlled, graded increased exposure to perfumes; she tolerates this well and is able to return to normal activities. 

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