

These discussions relate to the CME quiz appearing in the Supplement to the April 1996 issue of JAOA.

1. (c) Tobacco smoke is an example of an irritant, as are perfumes, aerosols, paints, formaldehyde, and other strong-smelling materials. Irritants may directly stimulate the target organs in an allergic individual to produce symptoms, but they do *not* cause the production of specific immunoglobulin E (IgE).

2. (a) Nasal polyps are an infrequent finding in patients with rhinitis, especially in children. Their presence in children mandates a workup for cystic fibrosis.

3. (b) Pneumonia is *not* related to upper airway obstruction by allergen exposure, as are all the other listed conditions. Recurrent sinopulmonary infections should raise the index of suspicion for antibody deficiency syndromes, and quantitative immunoglobulins should be ordered.

4. (d) Headache, malaise, low-grade fever, and mucopurulent discharge may accompany the acute viral rhinosinusitis process, but severe facial pain is *not* common.

5. (c) Cigarette smoke contributes to persisting sinus disease by diminishing ciliary function, thereby impeding the ciliary motion that carries bacteria and noxious particles to the ostium and into the nose for elimination. Also, maxillary drainage involves ciliary-dependent upward movement and joins the drainage of

the anterior ethmoid air cells in a functional unit, the ostiomeatal complex. This region is thought to be a focus of edema during a viral illness, resulting in obstruction of maxillary, frontal, and ethmoid drainage.

6. (c) Supportive therapy for acute viral rhinosinusitis can include nasal saline lavage, oral or topical decongestants (for a maximum of 5 days), antipyretics, and analgesics. The use of antibiotics, however, is *not* warranted and promotes bacterial resistance.

7. (a) Cell-mediated CD4-positive lymphocytes account for hypersensitivity pneumonitis.

8. (d) Avoidance is the treatment of choice for hypersensitivity pneumonitis. With avoidance of exposure, most of the symptoms resolve within 12 to 72 hours, and laboratory values gradually return to normal. The pulmonary function tests and chest radiograph may take weeks to show total resolution.

9. (e) A history of exposure to allergen differentiates hypersensitivity pneumonitis from pneumonia.

10. (c) A nonproductive cough is *not* considered part of a typical "pneumodrome." A typical pneumodrome includes a high spiking fever, sudden onset of symptoms, rigors, and an elevated white blood cell count.

11. (e) Elevated respiratory rate greater than 30 breaths per minute, a diastolic blood pressure of less than 60 mm Hg,

hemoptysis, and a lymphocyte count of less than 1000 cells/mm³ are all clinical indicators of severe pneumonia.

12. (c) The macrolide erythromycin would be appropriate for treatment of pneumonia in a patient younger than 60 years who has no comorbid medical condition. ♦