Preseptal and Orbital Cellulitis

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This month's quiz is based on the article "Preseptal and Orbital Cellulitis," which begins on page 15 of this issue. Choose the single best answer for each question.

1. **A 23-year-old outdoor laborer presents with complaints of a painful, red, swollen right eyelid. On examination, he has a temperature of 100.4°F and appears calm and healthy. He has a unilaterally edematous, tender, and erythematous superior right eyelid. Conjunctivae are clear, and there is no purulent discharge. There is no proptosis, and extraocular movements are intact. Which of the following is the most likely diagnosis?**
   (A) Acute viral conjunctivitis
   (B) Corneal laceration
   (C) Ophthalmitis of Grave's disease
   (D) Orbital cellulitis
   (E) Preseptal cellulitis

2. **Which of the following physical findings help distinguish between preseptal and orbital cellulitis?**
   (A) Temperature above 100°F
   (B) Audible bruit upon auscultation of the orbit
   (C) Proptosis of the affected eye
   (D) Nonreactive pupillary light reflex
   (E) Scleral icterus

3. **Which of the following patient factors could potentially increase the risk for orbital cellulitis?**
   (A) Diabetes mellitus type 2
   (B) HIV infection
   (C) Chronic sinusitis
   (D) Conjunctival colonization with *Staphylococcus aureus*
   (E) History of immunization against *Haemophilus influenzae* type B

4. **An 11-year-old girl with moderate mental retardation presents with multiple facial scratches from an unknown source and an edematous, tender, erythematous eyelid. She is afebrile and nontoxic in appearance. Visual acuity and extraocular movements are intact. There is no proptosis or nasal discharge. Which of the following is necessary in the management of this patient?**
   (A) Obtaining blood cultures
   (B) Hospitalization and surgical specialty consultation
   (C) Parenteral antibiotics
   (D) Computed tomography (CT) scan of the orbits
   (E) Antibiotic coverage of both gram-positive and gram-negative organisms

5. **A 4-year-old girl is brought to a primary care physician by her parents for increasing severity of illness over the last week. Seven days ago, she was diagnosed with acute rhinosinusitis and prescribed a macrolide antibiotic, which she repeatedly vomited. She received immunizations only at 2 months of age. On examination, the patient has a temperature of 102.6°F, is fatigued, and has copious yellow-green rhinorrhea. If this patient has orbital cellulitis, which of the following would you expect to find?**
   (A) Intact extraocular movements
   (B) No proptosis
   (C) Leukopenia on complete blood cell count
   (D) CT imaging that shows inflammation in the loose fatty tissue around the globe posterior to the orbital septum
   (E) Clear sinus air cells on CT imaging

6. **After making a diagnosis of orbital cellulitis, which of the following is the most important initial step in the treatment plan?**
   (A) Instill ophthalmic antibiotic drops
   (B) Administer antipyretics for temperature control
   (C) Institute parenteral antibiotics
   (D) Consult with an infectious disease specialist
   (E) Consider use of amphotericin B

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For answers, see page 42.

Answers to the Clinical Review Quiz which appears on page 26. The article on preseptal and orbital cellulitis begins on page 15.

1. (E) Preseptal cellulitis
2. (C) Proptosis of the affected eye
3. (C) Chronic sinusitis
4. (E) Antibiotic coverage of both gram-positive and gram-negative organisms
5. (D) CT imaging that shows inflammation in the loose fatty tissue around the globe posterior to the orbital septum
6. (C) Institute parenteral antibiotics

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