

A 6-year-old boy is brought to the clinic with 2 days of fever and facial swelling. The patient initially had a right earache and subsequently developed pain of his right and left cheeks with overlying swelling. His medical history is significant for 2 episodes of otitis media as a toddler and croup last year. The child is on a delayed vaccination schedule but is up to date as of age 3. He recently returned from a week of vacation in Costa Rica. The patient is in first grade, and his parents are not aware of any sick contacts at school. Temperature is 38.1 C (100.6 F), and other vital signs are normal. Examination shows bilateral swelling and tenderness anterior to the ears extending inferiorly and obscuring the angle of the mandible. The tympanic membranes are flat, gray, and mobile to insufflation. The rest of the examination is unremarkable. Which of the following complications is this patient at greatest risk for developing from this acute condition?

- ☐ A. Arthritis
- ☐ B. Aseptic meningitis
- ☐ C. Facial nerve palsy
- ☐ D. Mastoiditis
- ☐ E. Pneumonia

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- ☐ A. Arthritis [2%]
- ☒ B. Aseptic meningitis [19%]
- ☐ C. Facial nerve palsy [40%]
- ☐ D. Mastoiditis [35%]
- ☐ E. Pneumonia [3%]

[Proceed to Next Item](#)**Explanation:**

User Id: [REDACTED]

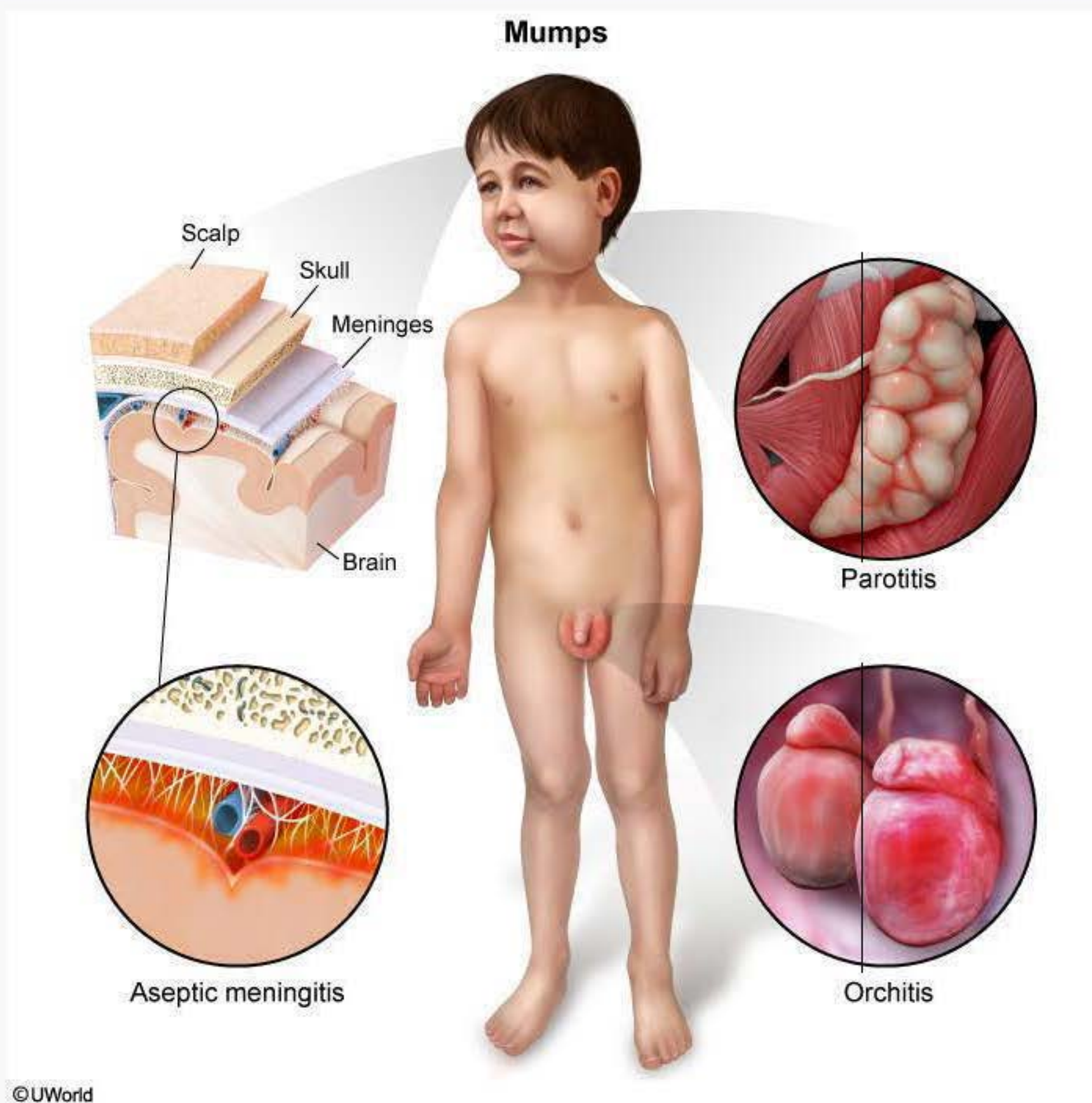
Mumps



Proceed to Next Item

Explanation:

User Id: [REDACTED]



This incompletely immunized child has **mumps**, a viral infection that presents with fever and **parotitis** after a nonspecific prodrome. Mumps is most common in school-age children, who often have a mild disease or may even be asymptomatic. Symptoms can



Aseptic meningitis



Orchitis

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This incompletely immunized child has **mumps**, a viral infection that presents with fever and **parotitis** after a nonspecific prodrome. Mumps is most common in school-age children, who often have a mild disease or may even be asymptomatic. Symptoms can be more severe in adolescents and adults, and complications are more likely in older patients.

In general, mumps is a self-limited condition, but serious complications are possible. **Aseptic meningitis** is the most common complication of mumps, with cardinal symptoms including headache, fever, and nuchal rigidity. **Orchitis** is another potential complication that occurs primarily in postpubertal males and can impair fertility.

Routine childhood immunization has reduced the incidence of mumps significantly, although both sporadic cases and outbreaks still occur in the United States. Prevention of orchitis is one of the primary reasons for universal vaccination.

(Choice A) Arthritis is a complication of rubella infection, particularly in adolescents and adults. Rubella presents with fever and a maculopapular rash that spreads caudally.

(Choices C and D) Both facial nerve palsy and mastoiditis are complications of acute otitis media. This child has no evidence of otitis; the tympanic membranes appear normal, and his earache is likely secondary otalgia from the parotitis.

(Choice E) Pneumonia is a complication of primary measles or varicella infection but is not seen in mumps.

Educational objective:

Mumps presents with fever and parotitis. Although mumps is generally self-limited, complications can include aseptic meningitis and orchitis.

References:

1. [Mumps](#).