

Case 1

A 24-year old female automotive technician presents herself at the doctor's office. She complains of fever and of pain in her left hand.

On physical examination, the patient had a deep wound on her left palm that was oozing pus. She had purplish, red streaks running up her left arm. She had enlarged lymph nodes at the elbow and under her arm. The patient's skin was warm and dry.

In her history, the patient had punctured her left palm with sharp metal from the undercarriage of a "real cherry" 1977 Malibu about a week earlier. She said the wound had bled for a few minutes and she thought that she had washed it "real good" with soap and water. She had covered the wound with a large "band-aid" and gone back to work. She developed a fever about three days later. For the past couple of days, she "did not feel so good" and had vomiting and diarrhea.

1. What type of infection do you believe she has in this hand?
 - a. *Streptococcus pyogenes*
 - b. *Staphylococcus aureus*
 - c. *Clostridium*
 - d. *Pseudomonas*
 - e. *Pasteurella multocida*
2. From complaint and physical examination, which of the symptoms lead you to your choice of agent?
 - a. the fever and pain in the hand
 - b. the fever, wound with oozing pus and enlarged lymph nodes
 - c. the lymph nodes and red streaks
 - d. the warm dry skin
 - e. the pain, red streaks and enlarged lymph nodes
3. From the history, which of the information confirmed your choice?
 - a. The wound had bled for a while.
 - b. The wound was cleaned with soap and water.
 - c. The wound had been covered and had perhaps become anaerobic.
 - d. She had diarrhea and vomiting.
 - e. The cut was from a rusting car frame.
4. Which of the following is most likely to follow this infection?
 - a. gangrene and amputation
 - b. toxic shock syndrome
 - c. muscle spasms
 - d. neurological disfunction of the hand
 - e. arthritis