

## Self-Assessment: Wrong-Site Orthopedic Operations on the Extremities

### LEARNING OBJECTIVES

- Identify high-risk areas of the body prone to wrong-site procedures.
- Recall ways the surgical mark can help prevent wrong-site surgery.
- Recognize when two time-outs would be indicated for an orthopedic operation on the extremity in the OR.
- Select ways of verbally confirming information that are high-risk and low-risk for wrong-site surgery.

### SELF-ASSESSMENT QUESTIONS

The following questions refer to the experience in Pennsylvania, from July 2004 through June 2013, of wrong-site operating room (OR) procedures on the extremities, typically done by orthopedic surgeons (Clarke JR. Wrong-site orthopedic operations on the extremities: the Pennsylvania experience. Pa Patient Saf Advis [online] 2015 Mar [cited 2015 May 19]. [http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2015/mar;12\(1\)/Pages/19.aspx](http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2015/mar;12(1)/Pages/19.aspx)).

The questions may be useful for internal education and assessment. You may use the following examples or come up with your own questions.

1. In Pennsylvania, in the nine years between July 2004 and June 2013, wrong-site orthopedic operations were performed on all extremity parts *except*:
  - a. The foot
  - b. The knee
  - c. The shoulder
  - d. The hand
2. Which of the following errors is most commonly involved in wrong-site hand procedures?
  - a. Operating on the wrong patient
  - b. Operating on the wrong hand
  - c. Doing the wrong procedure at the correct location
  - d. Doing a carpal tunnel release instead of the intended trigger finger release
3. Which of the following errors is most commonly involved in wrong-site knee procedures?
  - a. Operating on the wrong patient
  - b. Operating on the wrong knee
  - c. Doing the wrong procedure on the correct knee
  - d. Injecting anesthesia into the wrong knee joint as a prelude to the operation
4. Which of the following errors is most commonly associated with injecting anesthesia into the wrong knee as a prelude to the operation?
  - a. Not marking the operative site
  - b. Putting the tourniquet on the wrong leg
  - c. Draping the wrong leg
  - d. Not doing a time-out before the injection
5. There is no need to mark the site for an open repair of a fracture.
  - a. True
  - b. False
6. Which of the following interventions is most effective for preventing wrong-site hand surgery?
  - a. Ensuring the accuracy of the information when scheduling the procedure
  - b. Having the patient point to the correct site of operation before being prepped and draped
  - c. Marking the site as close to the incision as possible and referencing it during the time-out
  - d. Fully stating the procedure and site during the time-out

*(continued on page 82)*



(continued from page 81)

Question 7 refers to the following scenario:

*The patient was interviewed in the holding area preoperatively and verbally stated the correct limb and procedure in agreement with the consent. The correct knee was marked. After the patient was taken to the OR, the circulating nurse asked the patient, "Left knee, correct?" Patient answered, "Right." The resident put a tourniquet cuff on right knee. The surgeon injected the right knee while prepping. The circulating nurse asked to do a time-out. During the time-out, it was noted that the consent was for the left knee and the right knee had been prepared and injected with 1% lidocaine.*

7. Which of the following statements is most likely true:
  - a. The circulating nurse made the best effort possible to elicit confirmatory information, but the patient gave incorrect information in response.
  - b. The members of the OR team were aware of the site mark during their preparation of the patient in the OR.
  - c. A separate time-out is not indicated under the Universal Protocol for an injection of local anesthetic in the knee prior to an arthroscopy.
  - d. The site mark was referenced in the prepped and draped field during the time-out.
  - e. An injection of local anesthetic in the wrong knee prior to an arthroscopy meets the definition of a wrong-site procedure.

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