

# Kaplan USMLE Step 3 prep: Patient's voice is hoarse after surgery

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If you're preparing for the United States Medical Licensing Examination<sup>®</sup> (USMLE<sup>®</sup>) Step 3 exam, you might want to know which questions are most often missed by test-prep takers. Check out this example from Kaplan Medical, and read an expert explanation of the answer. Also check out all posts in this series.

## This month's stumper

A 24-year-old man returns to your office 10 days after a right knee arthroscopy for a medial meniscus tear. The patient originally injured his knee playing football with his brothers, and the MRI disclosed a meniscal tear.

The patient has no other medical history and underwent a successful arthroscopic meniscus removal under general anesthesia. He reports that since the surgery, his voice has been hoarse, and he often feels liquid getting into his windpipe.

Which of the following is the next best step in management of this patient?

- A. Tell him he has an upper respiratory tract infection.
- B. Tell him he should have his vocal cords visualized by an otolaryngologist.
- C. Tell him his symptoms are caused by a thyroid problem.
- D. Tell him his vocal cords were damaged by the endotracheal tube.
- E. Tell him it is normal to have a sore throat and hoarseness after surgery.

**The correct answer is B.**

## **Kaplan Medical explains why**

One of the risks of general anesthesia is damage to the vocal cords by direct trauma. Although rare, it does occur, and it manifests itself in just the way this patient presents: hoarseness after surgery that does not improve after one week.

Any such patient should have a full ENT evaluation by an otolaryngologist to determine if there is any cord paralysis or paresis. An ENT will visualize the vocal cords, ruling out any other pathology, such as a laryngeal polyp.

## **Why the other answers are wrong**

**Choice A:** This patient has no evidence of any upper respiratory infection (URI). Even if he did, however, given his proximity to general anesthesia and an endotracheal tube, it is much more likely that his symptoms are due to this event and not a URI.

**Choice C:** Given that the patient has recently had a general anesthetic, the likelihood that a thyroid problem is responsible for his hoarseness is very small.

**Choice D:** It is possible that this man's vocal cords were damaged from the endotracheal tube, but that has yet to be established by physical examination of the cords. Making the definitive diagnosis and failing to visualize the cords could result in a missed diagnosis of laryngeal polyp or other disturbance causing the hoarseness.

**Choice E:** It is normal to have a sore throat and hoarseness after surgery, but this is true only in the immediate postoperative period of less than 24 hours. There is nothing normal about residual hoarseness 10 days postoperatively.

## Tip to remember

Hoarseness that does not improve after one postoperative week should be evaluated by an otolaryngologist for damage to the vocal cords.

For more prep questions on USMLE Steps 1, 2 and 3, view other posts in this series.

The AMA and Kaplan have teamed up to support you in reaching your goal of passing the USMLE® or COMLEX-USA®. If you're looking for additional resources, Kaplan provides free access to tools for pre-clinical studies, including Kaplan's Lecture Notes series, Integrated Vignettes, Shelf Prep and more.